

YERMAKOV, V.S.; SPIRIN, S.A.; CHIZHOV, D.G.; UGOBETS, I.I.; LAVRENEKO, K.D.;
SMIRNOV, G.V.; CHUPRAKOV, N.M.; MKHITARYAN, S.G.; ASMOLOV, G.L.;
KOTILEVSKIY, A.M.; MOLOKANOV, S.I.; SYROMYATNIKOV, I.A.; FAYERMAN, S.Ts.;
SOKOLOV, B.M.; KOMISSAROV, Yu.P.; MALYUTIN, I.P.; POBEGAYLO, K.M.;
MORYAKOV, A.V.; MELAMED, M.F.; KUMSLASHVILI, P.G.; GARKAVAYA, L.A.;
LIVSHITS, N.M.; NEKRASOV, A.M.

Moisei Vul'fovich Safro; obituary. Elek.sta. 24 no.11:60 N '53.

(MIRA 6:11)

(Safro, Moisei Vul'fovich, ?-1953)

YERMAKOV, V.S.; KLOCHKOV, I.M.; CHIZHOV, D.G.; KOGTEV, G.I.; LAVRENNIKOV, K.D.; NEKRASOV, A.M.; SPIRIN, S.A.; VESHLOV, N.D.; KOTILEVSKIY, D.G.; SMIRNOV, G.Y.; MARINOV, A.M.; MAKSIMOV, A.A.; IVANOV, M.I.; MINOV, A.P.; CHUPRAKOV, N.M.; AVTONOMOV, B.V.; SYROMYATNIKOV, I.A.; MOLOKANOV, S.I.; FARMAN, S.TS.; GORSHKOV, A.S.; GOL'DENBERG, P.S.; SOKOLOV, B.M.; MAKUSHKIN, Ya.G.; MKHITARYAN, S.G.; RASSADNIKOV, Ye.I.; GRUDINSKIY, P.G.; POMICHEN, G.I.; SHCHERBININ, B.Y.; ZAYTSEV, V.I.; KONOREV, S.V.; KLYUSHIN, M.P.; PRISCHANSKIY, V.I.; SAFRANKUKYAN, G.S.; 1 dr...

IUrii Prokhorovich Komissarov; obituary. Elek.sta. 25 no.5:60 My '54.
(Komissarov, IUrii Prokhorovich, 1910-1954) (MLRA 7:6)

YERMAKOV, V.S.,

According to Lenin's plan. *Nanka i shizn'* 22 no.4:5-9 Ap '55.
(Electrification) (MLHA 8:6)

1. Zamestitel' ministra elektrostantsiy SSSR.

YERMAKOV, V.S.

PAVLENKO, A.S.; YERMAKOV, V.S.; UGOHNTS, I.I.; SMIRNOV, M.S.; CHIZHOV, D.G.;
KOGTEV, G.I.; BAUSTE, A.Y.; VINTER, A.V.; NEKRASOV, A.M.; LAVRENIENKO,
K.D.; KHYLOV, N.A.; KERTSELLI, L.I.

Sergei TSalikovich Faerman; obituary. A.S.Pavlenko and others.
Elek.str.26 no.10:62 0 '55. (MLRA 8:12)
(Faerman, Sergei TSalikovich, d.1955)

PERVUPHIN, M.G.; LOGINOV, P.G.; ZHIMERIN, D.G.; PAVLENKO, A.S.;
KULEV, I.A.; DONCHENKO, V.I.; DROBYSHOV, A.I.; DMITRIYEV, I.I.;
YERMAKOV, V.S.; SOSNIN, L.A.; PODUSHKIN, A.S.; SMIRNOV, M.S.;
TARASOV, N.Ya.; NIKOL'SKIY, G.P.; KRYLOV, M.A.; KOOTEV, G.I.;
ACHKASOV, D.I.; VASELOV, N.D.; CHIZHOV, D.G.; UGOBETS, I.I.;
NIKIFOROV, P.N.; PLATONOV, N.A.

Vladimir Nikolaevich Sergeev; obituary. Elek. sta. 27 no.3:63 Mr
'56. (MIRA 9:8)

(Sergeev, Vladimir Nikolaevich, 1903-1956)

MALENKOV, G.M.; PERVUKHIN, M.G.; KUCHERENKO, V.A.; ZHIMMERIN, D.G.; LOGINOV,
F.G.; PAVLENKO, A.S.; YERMAKOV, V.S.; VINTER, A.V.; DMITRIYEV, I.I.;
UGORETS, I.I.; BEKHTIN, N.V.; VOZNESENSKIY, A.N.; VASILENKO, P.I.;
BOROVVOY, A.A.; NOSOV, R.P.; KRISTOV, V.S.; BELYAKOV, A.A.; RUSSO,
G.A.; VASIL'YEV, A.F.; REPKIN, V.P.; THERMAN, I.A.; ORLOV, G.M.;
CHUMACHENKO, N.A.; BESCHINSKIY, A.A.; YAROSH, V.F.

Pavel Pavlovich Laupman; obituary. Gidr. stroi. 26 no.5:62 My '57.
(Laupman, Pavel Pavlovich, 1887-1957) (MLRA 10:6)

YERMAKOV, V.S.

YERMAKOV, V.S.

Plans for developing atomic energy in Britain. Elek.sts. 28
no.10:94-95 '57. (MIRA 10:11)
(Great Britain--Atomic energy)

YERMAKOV, V.S., Cand Tech Sci -- (diss) "Study of
~~the~~ processes of heat transfer in heat-^{generating}~~producing~~
elements of a nuclear reactor." Minsk, 1958, 16
pp (Acad Sci BSSR. Department of Phys Math and Tech
Sci. Inst of Power Engineering) 100 copies (KL, 29-58,
132)

- 53 -

IVANOV, A.V.; YERMAKOV, V.S.

Applying Laguerre polynomials to the solution of telegraphic
equations. Inzh.-fiz.zhur. no.1:6-16 Ja '58. (MIRA 11:7)

1. Institut energetiki AN BSSR, g.Minsk
(Electric circuits) (Calculus, Operational)

YERMAKOV, V.S.

Measuring the flow of neutrons in nuclear reactors. Inzh.-fiz.
zhur. no.2:113-117 F '58. (MIRA 13:1)

1. Institut energetiki AN BSSR, Minsk.
(Neutrons) (Ionisation chambers)

YERMAKOV, V.

AUTHORS: Gel'fond, A., Karandeyev, K., 105-58-4-35/37
Chistyakov, N., Shumilovskiy, N., Levin, M.,
Yermakov, V., Kobrinskiy, N., and others

TITLE: V. N. Mil'shteyn (Deceased)

PERIODICAL: Elektrichestvo, 1958, Nr 4, pp. 94-94 (USSR)

ABSTRACT: Obituary notice. On January 9, 1958 Professor Viktor Naumovich Mil'shteyn, Dr. of Technical Sciences died at the age of 44. After he finished the Moskau Institute for Power Engineering he worked in industry and as pedagogue. In 1938 he became Candidate and in 1945 Dr. of Technical Sciences. Since then he was Director of the Chair for Electric and Automatic Apparatus at the Moskau Institute for Aviation imeni Ordzhonikidze. In 1949 he changed over to the Scientific Research Institutes for Systems at the Committee for Standards, Measures and Measuring Apparatus. At the same time he worked as pedagogue at the Penza Institute for Industry and then at the Moskau Electrotechnical Institute for Telecommunications. He wrote many

Card 1/2

V. N. Mil'shteyn (Deceased)

105-58-4-35/37

publications and many inventions were made by him. His scientific work included the field of theoretical electrical engineering and radio engineering as well as the problems on the theory and the calculation of measuring instruments, automation elements and electromagnetic mechanisms. Before his death he had his monography "The Energetic Relations in Electrical Measuring Instruments" printed. There are 1 figure.

AVAILABLE: Library of Congress

1. Obituary

Card 2/2

YERMAKOV, V. S.

AUTHOR: Yermakov, V.S., Engineer

96-1-24/31

TITLE: Economic Calculations on Feed Water and Steam Piping
(Ekonomicheskiiy raschet pitatel'nykh i parovykh
truboprovodov)

PERIODICAL: Teploenergetika, 1958, Vol.5, No.1, pp. 82 - 83 (USSR).

ABSTRACT: This note gives a brief account of technical and economic considerations in the dimensioning of feed water and steam piping according to British power station design practice. It is taken from the publication "Power Station Auxiliary Plant" by Kennedy and Hutchinson.
There is 1 non-Slavic reference.

AVAILABLE: Library of Congress.
Card 1/1

YERMAKOV, V.S.

Investigating processes of heat transfer in heat producing
elements of nuclear reactors [with summary in English]. Inzh.-fiz.
zhur. no. 9:3-15 S '58. (MIRA 11:10)

1. Institut energetiki AN BSSR, g. Minsk.
(Nuclear reactors)
(Heat--Conduction)

VEYNIK, A.I.; VERMAKOV, V.S.; LYKOV, A.V.

Applying the Onsager theory to the study of the diffusion of
neutrons in absorbing media of nuclear reactors. Inzh.-fiz.
zhurn. no.10:123-129 0 '58. (MIRA 11:11)

1. Institut energetiki AN BSSR, g. Minsk.
(Nuclear reactors) (Nuclear physics)

SOV/98-58-11-6/15

AUTHORS: Yermakov, V.S. and Khanin, M.L., Engineers

TITLE: The Water Power Resources of the Belorussian SSR (Gidro-energeticheskiye resursy Belorusskoy SSR)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 11, pp 28-34 (USSR)

ABSTRACT: The Belorussian Republic has no hydroelectric power plants on its territory. The needs of industry and population are met by thermoelectric power plants, fuelled mainly with peat. The authors find that the planned construction of hydroelectric power plants will solve the power problems of the republic. The possible locations of these plants on the main rivers are enumerated. There are 2 tables, 2 charts, 1 profile and 1 graph.

1. Power plants--USSR

Card 1/1

YERMAKOV, V.S.; IVANOV, A.V.

Investigating the nonstationary heat transfer in heat-producing
elements of nuclear reactors [with summary in English]. Inzh.-
fiz.smur. no.12:96-112 '58. (MIRA 11:12)
(Nuclear reactors)
(Heat--Radiation and transmission)

YERMAKOV, V.S., insh.; PEKELIS, G.B., insh.

Developing the power system of economic regions. Elek. sta. 29
no. 3:2-6 Mr '58. (MIRA 11:5)
(Electric power plants)

YERMAKOV, V.S., insh.; PEKELIS, G.V., insh.

Present-day conditions for the development of peat-operated electric
stations. Torf. prom. 35 no.5:1-7 '58. (MIRA 11:10)

1. Gosplan BSSR.
(Electric power plants)

YERMAKOV, V.S.

21(4)

PHASE I BOOK EXPLOITATION

309/2583

International Conference on the Peaceful Uses of Atomic Energy.

2nd, Geneva, 1958.

Bakley sovetskikh yadernykh; yadernyye reaktory i yadernaya energiya (Report of Soviet Scientific Mission to the International Conference on the Peaceful Uses of Atomic Energy, 1958, 707 p. (Series: IAEA Study, vol. 2) Extra slip inserted. 8,000 copies printed.

General Eds.: M.A. Bolshak, Corresponding Member, USSR Academy of Sciences, A.K. Kravtsov, Doctor of Physical and Mathematical Sciences, A.I. Lopyrevskiy, Member, Ukrainian SSR Academy of Sciences, I.I. Brevilov, Corresponding Member, USSR Academy of Sciences, and V.J. Pervov, Doctor of Physical and Mathematical Sciences; Ed.: A.P. Alyab'ev, Tech. Ed.: Ye. I. Masel'.

NOTE: This book is intended for scientists and engineers engaged in reactor designing, as well as for professors and students of higher technical schools where reactor design is taught.

CONTENTS: This is the second volume of a six-volume collection on the peaceful uses of atomic energy. The six volumes contain the reports presented by Soviet scientists at the Second International Conference on Peaceful Uses of Atomic Energy, held from September 1 to 13, 1958 in Geneva. Volume 2 consists of three parts. The first is devoted to atomic power plants under construction in the Soviet Union; the second to experimental and research reactors, the experiments carried out on them, and the work to improve them; and the third, which is predominantly theoretical, to problems of nuclear reactor physics and construction engineering. Yu. I. Masel' is the scientific editor of this volume. See 309/2081 for titles of all volumes of the set. References appear at the end of the articles.

Mostovoy, V.I., V.J. Dikarev, M.M. Yegorov, and Yu. S. Salytkov. Measuring Neutron Spectra in Uranium Water Lattices (Report No. 2158)

245

Krasin, A.K., B.G. Dubovskiy, M.M. Lentsov, Yu. Yu. Glazkov, E.M. Gerasimov, A.V. Kozlov, L.A. Gerasimov, V.V. Vavilov, Yu. I. Lyubimov, and A.P. Serebrennikov. Studying the Physical Characteristics of a Beryllium-moderator Reactor (Report No. 2159)

255

Galatin, A.D., G.A. Maslovskiy, A.P. Medik, Yu. G. Abey, V.J. Salda, and P.A. Kravchinskiy. Critical Experiment on an Experimental Heavy-water Reactor (Report No. 2038)

270

Marchuk, G.I., V. Ye. Pukhov, Ye. I. Pogodina, V.V. Smilov, I.P. Tyuterev, S.Y. Fistonova, and G.I. Krutshina. Certain Problems in Nuclear Reactor Physics and Methods of Calculating Them (Report No. 2151)

288

Slavutin, G.V. and V.M. Semenov. Determination of Control Rod Effectiveness in a Cylindrical Reactor (Report No. 2469)

613

Gelfand, I.M., S.M. Fyuberg, A.S. Prolov, and M.M. Chentsev. Using the Method of Successive Approximation for Solving the Kinetic Equation (Report No. 2141)

628

Galatin, M.I. Neutron Distribution in a Heterogeneous Medium (Report No. 2159)

634

Krasovskiy, M.V., A.V. Stepanov, and P.L. Shapiro. Neutron Thermalization and Diffusion in Heavy Media (Report No. 2148)

651

Vernik, A.I., V.J. Yermakov, and A.V. Lykov. Using the One-Group Theory for Studying Neutron Diffusion in the Absorbing Media of Nuclear Reactors (Report No. 2224)

668

Broder, D.L., S.A. Burdin, A.A. Butusov, V.V. Levin, and V.V. Orlov. Studying the Spatial and Energy Distribution of Neutrons in Different Media (Report No. 2147)

674

Saltykov, A.B. Neutron Ionization Chambers for Work in Nuclear Reactors (Report No. 2084)

690

Kirillin, V.A., and S.A. Ulybin. Experimental Determination of Specific Volumes of Heavy Water in a Wide Temperature and Pressure Range (Report No. 2471)

696

26.2223

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 5, P. 80, # 10790

AUTHOR:

Yermakov, V.S.

TITLE:

Investigation of the Temperature Field in the Heat Producing Elements of a Nuclear Reactor

PERIODICAL: Tr. In-ta energ. AN BSSR, 1959, No. 9, pp. 92-116

TEXT:

The author considers the heat transfer process in a cylindric four-layer heat producing element. The latter consists of the core element (nuclear fuel), the coupling interlayer, the shell, and the scale layer. At first, the steady process is considered. It is presumed that the heat source power (Q_0) does not depend on r and varies over the rod length according to the cosine law. The temperature of the butt surface of the rod is assumed to be equal to the temperature of the heat carrier. A formula is obtained for the relative temperature drop (Δt) between the core surface and the external surface of the multilayer heat-producing element. The unsteady processes of heat transfer in cylindric rod are considered in case of uniform initial distribution of the rod and constant temperature at the ends of the rod, which is equal to

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A005/A001

Investigation of the Temperature Field in the Heat Producing Element of a Nuclear Reactor

the temperature of the heat carrier. A formula is obtained for Δt^* in general form in case of arbitrary functions $Q(r, z, \tau)$ and $q_s(z, \tau)$ (thermal flux at the lateral surface of the fuel core). The solutions of the problem are considered for specific conditions of heat exchange in the heat producing element of the ВВР - (VVR) reactor (uranium rods with $d = 0.82$ cm with steel claddings of 1 mm thickness; scale does not exist). Nomographs are plotted for practical computations of the steady and unsteady heat exchange. The transient conditions of the reactor operation are studied, when $Q(z, \tau)$ is an exponential time function. A nomograph is plotted convenient for calculating the heat exchange for the emergency conditions of the reactor operation.

B.A. Levin

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

32429

S/020/61/141/006/014/021
B103/B147

15.9201

11.2211

AUTHORS:

Yermakova, I. I., Dolgoplosk, B. A., Corresponding Member
AS USSR, and Kropacheva, Ye. N.

TITLE:

Cis-trans isomerization of the links of 1,4-polybutadiene
under the effect of nitrogen peroxide

PERIODICAL:

Akademiya nauk SSSR. Doklady, v. 141, no. 6, 1961,
1363 - 1365

TEXT: The isomerizing effect of NO_2 and its dimer N_2O_4 , of hexaphenyl
ethane, and of three disulfides was studied on 2% benzene solutions of
a) cis-1,4-polybutadiene, and b) cis-butene-2 in glass ampullas. The
content of 1,2 or trans-1,4 links in the polymer was calculated on the basis
of the intensity in the maxima 909 and 967 cm^{-1} , respectively, of the
infrared spectra (spectra taken by Z. D. Stepanova). The change of the
cis-trans forms of the butenes was recorded chromatographically during the
process (by A. N. Genkin). It has been found that in case a) the cis-links
of the polymer chain are isomerized to trans-links, i. e., the more inten-
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S/020/61/141/006/014/021
B103/B147

Cis-trans isomerization...

sively the higher the NO_2 concentration. Thus, 23.5 mole% of NO_2 results in a polymer with 60% of trans-links. No isomerization occurred at -50°C owing to the tendency of NO_2 to dimerize below 0°C . Isomerization seems to be effected merely by the NO_2 form. At $+96^\circ\text{C}$ as well as at -50°C , NO_2 is added quantitatively to the double bond. The resulting products are insoluble in a hydrocarbon medium. In case b) similar results were obtained. With a NO_2 concentration of 6 mole%, 40% of cis-butene-2 is converted to trans-butene-2 at 90°C within 2.5 hr. The reaction does not reach the equilibrium state, because NO_2 is consumed by the addition. Neither hexaphenyl ethane at $96 - 130^\circ\text{C}$ nor diphenyl-picryl hydrazyl at 20° and 60°C cause structural changes of the chain in case a). The disulfides decomposing into free radicals at 120°C (Refs. 1 - 4, see below) only lead to gel formation without isomerization, one radical being added to the double bond. It is assumed that the isomerization under the effect of RS^\cdot radicals, which is described in Refs. 1 - 4, does not take place owing to their addition to the double bond, but only when an H atom is broken off from the chain. The mercaptan formed in stage 1 takes part in the chain transfer; this results

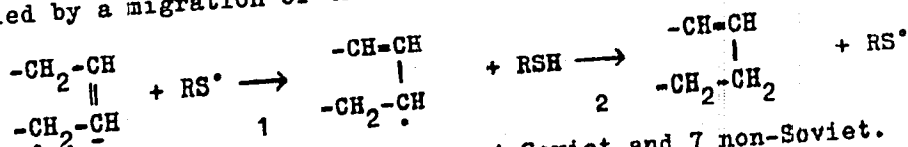
Card 2/3

32129

S/020/61/141/006/014/021
B103/B147

Cis-trans isomerization...

in the regeneration of the RS[•] radicals. Such an isomerization has to be accompanied by a migration of the double bond:



There are 2 figures and 11 references: 4 Soviet and 7 non-Soviet. The four most recent references to English-language publications read as follows: Ref. 1: J. I. Cunneen, F. W. Shipley, J. Polym. Sci., 36, 77 (1959); Ref. 2: J. I. Cunneen et al., Trans. Inst. Rubber Ind., 34, 260 (1959); Ref. 3: J. I. Cunneen, W. F. Watson, J. Polym. Sci., 38, 521 (1959); Ref. 4: J. I. Cunneen, W. F. Watson, ib. 533. ✓

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva (All-Union Scientific Research Institute of Synthetic Rubber imeni S. V. Lebedev)

SUBMITTED: August 18, 1961

Card 3/3

YERMAKOVA, I.I.; KROPACHEVA, Ye.N.; DOLGOFLOSK, B.A., akademik; KOL'TSOV,
A.I., akademik; NEL'SON, K.V.

Interaction of 3-methyl-2-pentene with cation-type catalysts.
Dokl. AN SSSR 159 no.4:835-838 D '64 (MIRA 18:1)

1. Nauchno-issledovatel'skiy institut sinteticheskogo kauchuka
im. S.V. Lebedeva.

IYERUSALIMSKIY, N.D.; ANDREYEVA, Ye.A.; LIROVA, S.A.; YERMAKOVA, I.T.

Hydrocarbon oxidation by yeast. Prikl. biokhim. i mikrobiol.
1 no. 6:601-605 M-D '65. (MIRA 18:12)

1. Institut mikrobiologii AN SSSR. Submitted Jan. 16, 1965.

L 05870-67 EWP(j)/ENT(m) RM/WW/JW
 ACC NR: AP6028898 SOURCE CODE: UR/0079/66/036/008/1419/1420

AUTHOR: Makarov, S. P.; Yermakova, I. V.; Shpanskiy, V. A.

ORG: none

TITLE: Fluorination of liquid acetonitrile with free fluorine

SOURCE: Zhurnal obshchey khimii, v. 36, no. 8, 1966, 1419-1420

TOPIC TAGS: fluorination, acetonitrile, free fluorine, *fluorine*

ABSTRACT: A study has been made of the fluorination of liquid acetonitrile with free fluorine rarefied with nitrogen. The reaction was conducted at 10—15C with vigorous agitation. There were no flares or explosions. Hydrogen fluoride formed in the reaction slowed down fluorination and had to be bound with sodium fluoride. The reaction products were fluoroacetonitrile, difluoroacetonitrile, N-fluoro-1,1-difluoroethylenimine, and N,N-difluoro-1,1-difluoroethylamine. The reactions can be represented as follows:

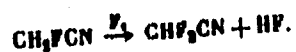
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Card 1/2

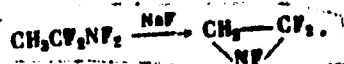
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ACC NR: AP6028898



The cyclic product could have been formed by dehydrofluorination of N,N-difluoro-1,1-difluoroethylamine η



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SUB CODE: 07/ SUBM DATE: 17Jul65/ ORIG REF: 001/ OTH REF: 004

kh

Card 2/2

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
p 24 (USSR) 15-1957-3-2685

AUTHOR: Yermakova, K. A.

TITLE: New Species of Vesicular Tetracorals (Novyye vidy puzyr-
chatykh korallov rugoza)

PERIODICAL: Tr. Vses. n-i. geol-razved. nef. in-ta, 1956, Nr 7,
pp 31-36

ABSTRACT: The author describes in detail the following species
from Middle Devonian (Givetian) rocks on the western
slope of the northern Urals: Lythophyllum aequivesicu-
lare sp. n. and L. acutum sp. n. (of the family Cysti-
phyllidae Roem., subfamily Lythophyllinae Wdkd.). The
paper has one table.

Card 1/1

YERMAKOVA, K.A.

Tetracoralla and Tabulata of the Russian Platform. *Biul.MOIP.*
Otd.geol. 31 no.4:110-111 J1-Ag '56. (MLRA 9:12)

(Russian Platform--Corals, Fossil)

YERMAKOVA, K.A.

New species of Devonian rugosa corals from central provinces of
the Russian Platform. Trudy VNIIGI no.8:160-191 '57.
(MIRA 12:2)

(Russian Platform--Rugosa)

YERMAKOVA, K.A.

Some species of Devonian coelenterates from central and eastern
areas of the Russian Platform. Trudy VNIIGI no.16:69-105
'60. (MIRA 13:6)
(Russian Platform--Coelenterata, Fossil)

YERMAKOVA, K. A., Cand Geol-Min Sci -- (diss) "Devonian corals of the Russian Platform and of Timan." Leningrad, 1960. 14 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Leningrad Mining Inst im G. V. Plekhanov); 200 copies; price not given; (KL, 17-60, 144)

YERMAKOVA, K.A.

Paleozoogeographic regionalization of the Kifai Sea of the
Russian Platform. Biul. MOIP Otd. geol. 40 no. 6:149 M-D '65.

1. Submitted May 7, 1965.

REZANOV, I.A.; NCA) TKHYONG SHAN; SHEYNMANN, Yu.M.; RATS, M.V.; KRUG, O.Yu.;
 ZYRYANOV, V.N.; RAKCHEYEV, A.D.; YAKOVLEVA, Ye.B.; PETROVA, M.A.;
 PETHOV, Yu.I.; KUZNETSOV, Ye.A.; YUDINA, V.V.; BARDINA, N.Yu.;
 SIMANOVICH, I.M.; ATANSYAN, S.V.; SERGEYEVA, A.M.; PARFENOV, S.I.;
 RUTKOVSKI, Yatssek [Rutkowski, Jacek]; MAKHLINA, M.Kh.; ZVEREV, V.P.;
 TERNOVSKAYA, V.T.; SAMOYLOVA, R.B.; YERMAKOVA, K.A.; BYKOVA, N.K.;
 MEYKEN, S.V.; BARSKOV, I.S.; IL'INA, L.B.; BABANOVA, L.I.;
 DOLITSKAYA, I.V.; GORBACH, L.P.; BUTS'KO, S.S.; TRESKINSKIY, S.A.;
 SVOZDETSKIY, N.A.; PRYALVKHINA, A.F.; GROSVAL'D, M.G.; MODEL', Yu.M.;
 GORYAINOVA, I.N.; MEDVEDEVA, N.K.; MYALO, Ye.G.; DOBROVOL'SKIY, V.V.;
 KHOROSHILOV, P.I.; CHIKISHEV, A.G.

Brief news. Biul. MOIP. Otd. geol. 40 no.3:122-154 My-Je '65.
 (MIRA 18:8)

YERMAKOVA, K.A.

Some Middle Devonian corals of the Ural region. (MIRA 18:1)
UNION no. 43:94-123 '64

YERMAKOVA, K. G.

GENREL', P.A.; ANDREYEVA, I.N.; YERMAKOVA, K.G.; TSVETKOVA, I.V.

Effect of the new tillage system on the basic features in the
physiology of wheat. Izv. AN SSSR. Ser.biol. no.4:448-465 J1-Ag '57.
(MLRA 10:8)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva Akademii nauk
SSSR.

(TILLAGE) (WHEAT)

<p>CA YERMAKOVA, K.I.</p>		<p>107 AND 108 SERIES CONCISE AND REPERTOIRE NEWS</p>	
<p>THE COST AND THE HOT STAGE OF METAL OXIDE. K. I. Yermakova, A. P. Hornelov and M. S. Nishan. <i>Acta Physicochim. U. R. S. S. R.</i> 12, 679-700 (1958) (in English).-- The initial reaction velocity for the reaction $\text{Me}_2\text{O} + \text{O}_2$ at 220-280° and $p = 60-80$ mm. is given by an eq. $\log v = \log A - 6000/T$. From data on the induction period for the various regions of onset and hot flame formation, the equation $v(p - p_0)^n = \text{const.}$ is found applicable with $n = \text{induction period and } n = 1.1$ for metal, with pure O_2 and 1.5 for air at 280°. The temp. dependence is given by $v \propto T^y$ with $y = 0.8(11)$. For Me_2O, the boundary curve between the regions of slow and explosive burning, is given by $\log p = (A/T) + B$ with $A = 2800$. Addn. of Me_2O (up to 3 mm.) to Me_2O minn. decreases the induction period; the equation $v = (1/\delta) \cdot [\ln((n_0/\delta)) + \{p/\delta\}]$ in n in $[1 + (n_0/\delta)]$ holds as in the case of butane. (C. A. B. 4289, 4290, 5017) with $n_0 = \text{crit. concn. of accumulated peroxide} = 3 \text{ mm. at } 245^\circ, 3 \text{ mm. at } 280^\circ; \delta = 1.5 \text{ at } 245^\circ, 2.5 \text{ at } 280^\circ; \delta = \text{coeff. of utilization of the peroxide} = 1, \text{ and } n = \text{concn. of peroxide. For the addn. of } \text{Me}_2\text{O} \text{ to } \text{Me}_2\text{O}, \delta = 1; \text{ to butane } \delta \approx 0.01. \text{ (Cf. also preceding abstract.)}$</p>		<p>P. H. Rothmann</p>	
<p>ASTM-ILA METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>10000 DIVISION</p>		<p>10000 HLP DIV 501</p>	
<p>10000 01</p>		<p>10000 01</p>	

YERMAKOVA4K818

600

1. YERMAKOVA, K. I.; YERMOLOVA, A.P.; NEYMAN, M. B.

2. USSR (600)

"Research on the Conditions of the Combustion of Gaseous Mixtures — XV.
The Cold and Hot Flames of Methyl Ether", Zhur. Fiz. Khim 13, No 12, 1939. Leningrad
Inst. of Chemical Physics, Lab of the Oxidation of Hydrocarbons.
Received 26 July 1939.

9. Report - U-1615, 3 Jan. 1952.

TERMAKOVA, K. I.

Q

2

Cold and hot flames of other ether. K. I. Termakova, J. Phys. Chem. (U. S. S. R.) 16, 142-50 (1942); II, C. A. 36, 2680. The pressure in H_2 -O₂ and H_2 -O₂-O mixts. varies in the course of their slow combustion in 6 different ways according to temp. and concn. of the mixts. The boundaries of these regions are described in the paper. The boundaries of cold flames are confined between 50 and 140 mm. Hg and between 170° and 220°. In one of the regions the induction period of ignition can be measured; K. decreases when pressure and temp. increase. R. C. F. A.

Hydrocarbons Oxidation Lab., Penzance Inst. Chem. Physics

ASS. SEC. METALLURGICAL LITERATURE CLASSIFICATION

DATE

YERMAKOVA, B.

N

3470 On the Disintegration of Boron by Cosmic Rays.
A. P. Zhdanov and E. I. Ermshteyn. Doklady Akad.
Nauk S.S.R., No. 217-218(1967)(in Russian).

The authors point out that the use of thick photographic emulsions for the study of nuclear disintegrations has been introduced by the Russian Mysorevskii (Z. Physika 44, 406 (1967)). The present paper describes an improvement of this method, which removes the uncertainty as to the nature of the atom that has undergone a disintegration. During the preparation of an emulsion, a suspension of an element, e.g., boron, is introduced; all the suspension grains being conspicuously larger than the other grains that will appear in the developed photographic emulsion; in this way a star, whose prongs emerge from a boron grain, will certainly represent a disintegration of a B atom. Photographs of several such stars, produced by cosmic rays, are given and discussed. One of them, exhibiting four prongs, is interpreted as $\pi^+ + \mu^- \rightarrow W^+ + \mu^+$; $\mu^+ + n$, a new reaction type, showing a capture of a slow negative particle and a liberation of a lighter positive meson.

Rubium Inst. - Dept. Chem. Sci. AS USSR

AEC-SLA METALLURGICAL LITERATURE CLASSIFICATION

SOURCE STUDIES
LONDON 94
SOURCES MAP DIV CODE
COLLECTION NO.
12345678910111213141516171819202122232425262728293031323334353637383940414243444546474849505152535455565758596061626364656667686970717273747576777879808182838485868788899091929394959697989900

YERMAKOVA, K.I.

20-6-11/48

AUTHORS: Zhdanov, A.P., Berkovich, I.B., Yermakova, K.I., Lapekhin, F.G., Skirda, N.V., ~~Nichalova~~, Z. S...

TITLE: An Interaction of High Energy Particles with Nuclei (O vzaimodeystvii chastits vysokoy energii s yadrami)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 115, Nr 6, pp. 1093 - 1096 (USSR)

ABSTRACT: The present paper describes the provisional results of the analysis of seven rays with relatively great number of shower particles, which were produced in the interaction with emulsion nuclei. When inspecting one particle of the staple of Ilford G-5 emulsions (Il'ford G-5), which was irradiated for seven hours in a height of about 30 km, the authors chose that irradiation which was produced by neutral and charged particles. When analysing these cases rather reliable data were obtained only on the number of shower particles and on the angular distribution of which. The angles between the direction of motion of the primary particle and the traces of the secondary particle were measured by the coordinate-method by the aid of the microscope MBI-8. The characteristics of these distributions are compared in a table. The authors graphically represented

Card 1/3

20-6-11/48

An Interaction of High Energy Particles with Nuclei

the dependence $(1/N) \int H(\theta) d\theta$ on θ . All rays were subdivided into three types. The rays of the first type, which are characterized by a narrow cone, have a symmetrical integral distribution. The rays with a considerably larger cone and a higher number of charged particles belong to the second type. A further diagram illustrates the angular distribution for such ray in which not even within the range of small angles a symmetry can be ascertained. Each theoretical investigation of the mechanism of producing elementary particles starts from the symmetrical flying off of the developed particles in the center-of-gravity system. This corresponds to a certain symmetry of the angular distribution in the laboratory system. This symmetry is actually observed in the element. The most essential statements of the theory of Fermi-Landau can be applied to these cases. There are 4 figures, 2 tables and 8 references, 3 of which are Slavic.

Card 2/3

20-6-11/48

An Interaction of High Energy Particles with Nuclei

ASSOCIATION: Radium-Institute imeni V.G. Khlopin, AN USSR
(Radiyevyy institut im. V.G. Khlopina Akademii nauk SSSR)

PRESENTED: April 4, 1957, by A.F. Ioffe, Academician

SUBMITTED: March 26, 1957

AVAILABLE: Library of Congress

Card 3/3

YERMAKOVA, L. A.

8/181/60/002/04/25/034
B002/B063

14.7700

AUTHORS: Koptsik, V. A., Yermakova, L. A.

TITLE: Investigation of the Temperature Dependence of Electric and Elastic Parameters of Cancrinite

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 4, pp. 697-700

TEXT: In an earlier paper (Ref. 2), the dielectric constant ϵ , as well as the piezoelectric and elastic moduli of cancrinite had been determined at room temperature. In the present paper, the authors determine its behavior between $+20^{\circ}\text{C}$ and -140°C . The temperature was measured with an accuracy of 0.2°C , the dielectric, piezoelectric, and elastic coefficients with an accuracy of 4, 9, and 3%, respectively. The same samples were used, that had served for earlier published determinations. To be true, there occurred deviations which are explained by the aging in one year. Three different sections were examined (Figs. 2, 3, and 4). At low temperatures, anomalies occur in ϵ and the piezoelectric moduli; the precise position is dependent on the orientation of the cut. The anomalous dielectric behavior of cancrinite can be explained by the structure (Fig. 1): According to

Card 1/2

Investigation of the Temperature Dependence
of Electric and Elastic Parameters of
Cancrinite

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S/181/60/002/04/25/034
B002/B063

V. A. Ioffe and I. S. Yanchevskaya, this anomaly corresponds to a resonance absorption at 180 kilocycles; it is possibly the consequence of an electron transition in the aluminum oxygen tetrahedron from one oxygen atom to another. The piezoelectric anomalies are apparently related to the dielectric ones. These conclusions are only provisional, an accurate investigation requires a better structural determination and an investigation on synthetic material. There are 4 figures and 6 references: 5 Soviet and 1 French.

ASSOCIATION: MGU, fizicheskiy fakul'tet
(Moscow State University, Department of Physics)

SUBMITTED: May 22, 1959

Card 2/2

9.5110 (aka 10.55, 1072)

20714

S.4800

1043, 1137, 1273

S/120/61/000/001/057/062
E194/E184

AUTHORS: Koptsik, V.A., Strukov, B.A., and Yermakova, L.A.

TITLE: A Precision Laboratory Cryostat for Investigating the Electrical and Elastic Properties of Crystals

PERIODICAL: Pribery i tekhnika eksperimenta, 1961, No.1, pp.184-188

TEXT: Progress in the development of laboratory cryostats is briefly reviewed. A circuit developed by B.N. Vasil'yev which was a further development of one used by Wilson and Stone (Ref.9) was used in constructing a precision laboratory cryostat for investigating the electrical and elastic properties of crystals in the region of polymorphous phase conversions. The apparatus was required to produce stable temperature points every 0.1-0.2 °C; the stabilisation of the temperature should be within ± 0.005 °C for a time of 30 minutes to one hour; the specimens should be maintained in vacuum or in an atmosphere of dry gas; electrical terminals in the thermostat chamber should be so designed as to ensure the complete absence of temperature gradients. The equipment consists of a cryostat, a temperature stabilising circuit, a vacuum system and a potentiometer circuit for

Card 1/7

20714

S/120/61/000/001/057/062
E194/E184

A Precision Laboratory Cryostat for Investigating the Electrical and Elastic Properties of Crystals

temperature measurement. The thermostat chamber of the cryostat consists of a copper block (9 in Fig.1), 180 mm high and 45 mm in diameter. In the cylinder are drilled two cylindrical ducts over three quarters of its length. One duct is used for thermocouples and the other for ampoules with specimens. The outer surface of the cylinder is threaded with a four start thread; two of the grooves contain nichrome wire heaters and the other two platinum resistance thermometers. The heater resistance is 1 kilohm and the thermometer resistance is 300 ohms. Under conditions of automatic control the surface of the copper block is maintained at a constant temperature. Because of the good thermal conductivity of the copper, after an interval of 10-15 minutes the same temperature is established in the volume for the test specimen. The copper block 9 covered with an aluminium screen 10 is placed in a cylindrical glass vessel with double walls. The inner space is connected to a vacuum flask containing liquid nitrogen. The temperature sensitive element is the platinum resistance

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20711

S/120/61/000/001/057/062
E194/E184

A Precision Laboratory Cryostat for Investigating the Electrical and Elastic Properties of Crystals

thermometer would on the copper block and connected in a balanced bridge circuit, the other arms of which are manganese resistances and an inductionless resistance box. When the resistance of the platinum thermometer alters, it alters the phase of the output signal from the bridge and the function of the rest of the circuit is to apply the necessary amount of heat to the heater to maintain the resistance of the platinum thermometer equal to that of the resistance box. A schematic diagram of the control system is given in Fig.2 and the method of operation is explained. The vacuum system consists of two main parts, one of which is used to evacuate the inner cylinder of the cryostat and the other to pump from the glass ampoule with specimen holder. The system includes a rotary vacuum pump, an oil vapour trap and appropriate valves and pressure measuring devices. The required temperature is obtained and maintained as follows. The copper block with the ampoule is placed in the inner vacuum flask of the cryostat. Liquid nitrogen is poured into the outer flask in which the level of nitrogen is

Card 3/7

X

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S/120/61/000/001/057/062
E194/E184

A Precision Laboratory Cryostat for Investigating the Electrical and Elastic Properties of Crystals

automatically maintained. Cooling commences at a rate of about 0.5 °C/min. When within 3 to 4° of the temperature required to stabilise, the inner vacuum flask is evacuated until the pressure in it reaches 10^{-3} mm Hg, then the rate of cooling rapidly diminishes. The bridge is then balanced by means of the resistance blocks. The automatic temperature control circuit is then connected and any further reduction in temperature takes place in steps controlled by the resistance blocks. The accuracy of stabilisation was checked by measuring the e.m.f. of a triple copper constantan thermocouple with a sensitivity of 0.1 mV/°C. During 60 minutes the temperature changed by less than 0.005 °C. The cryostat has been working for two years and temperature characteristics of a number of crystals have been obtained. Gratitude is expressed to B.N. Vasil'yev for useful suggestions and to A.F. Solov'yev for help in setting up the circuit. There are 3 figures and 13 references: 5 Soviet and 8 English.

Card 4/7

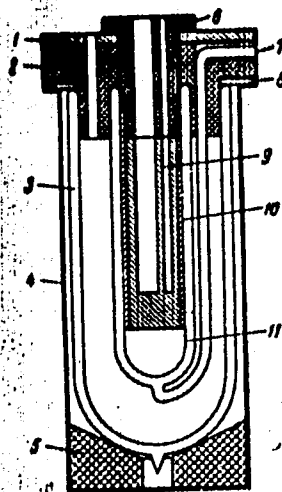
20714

S/120/61/000/001/057/062
E194/E184

A Precision Laboratory Cryostat

Legend to Fig. 1:

- 1 - Textolite cover;
- 2 - Porous Plastic Cover;
- 3 - Outer Flask;
- 4 - Protective Tin Casing;
- 5 - Wooden Block;
- 6 - Ebonite Stopper;
- 7 - Glass Connecting Pipe
(to Pump);
- 8 - Rubber Ring;
- 9 - Copper Block;
- 10 - Aluminium Screen;
- 11 - Inner Glass Flask;



Card 5/7

20714

A Precision Laboratory Cryostat ...

S/120/61/000/001/057/062
E194/E184

ASSOCIATION: Fizicheskiy fakul'tet MGU
(Physics Division of MGU)

SUBMITTED: December 30, 1959

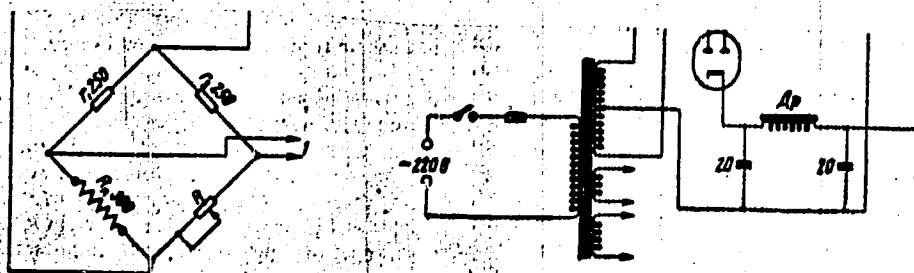


Fig. 2 continued

Card 7/7

KOPTSIK, V.A.; STRUKOV, B.A.; YERMAKOVA, L.A.

Precision cryostat for studying electric and elastic properties of
crystals in laboratories. Prib. i tekhn. eksp. 6 no.1:184-188
Ja-F '61. (MIRA 14:9)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.
(Cryostat)

HUZILOV, Yu. I., kand. ekon. nauk; Prinimali uchastiye: YERMAKOVA, L.A.; RESHETNIKOV, V.A.; RESHETNIKOVA, L.V.; RUMLEVA, K.I.; SAMOYLOV, N.P.; SERGEYEVA, V.S., red.; TIKHONOVA, Ye.M., red.

[Manual for establishing work norms and wages in livestock farming] Spravochnik po normirovaniu i oplate truda v zhivotnovodstve. Moskva, Kolos, 1964. 326 p.
(MIRA 18:8)

PRISTUPLYUK, N.I.; STEPICHEVA, V.V.; YERMAKOVA, L.D.

Changes in the strength of inserts made of an exothermic mixture
during their storage. Lit. proizv. no.4:46-47 Ap '62. (MIRA 15:4)

(Risers (Founding))

CHERNYSHEV, M.P.; ROZHKOV, L.P.; SHUL'GINA, Ye.F.; IGNATOVICH, A.F.;
LABUNSKAYA, L.S.; FOMINA, T.V.; CHERNYAKOVA, A.P.; SHEPAKOVA,
L.N.; TARASOVA, M.K.; ANFILATOVA, A.I.; SLAVIN, L.B.;
BARYSHEVSKAYA, G.I.; DERIGLAZOVA, N.V.; MATUSHEVSKIY, G.V.;
AL'TMAN, E.N.; KROPACHEV, L.N.; CHEREDILOV, B.F.; POTAPOV,
A.T.; DUDCHIK, M.K.; REGENTOVSKIY, V.S.; YERMAKOVA, L.F.;
SEMEKOVA, Ye.A.; KULIKOVSKIY, I.I.; KIRYUKHIN, V.G.; ANSENOV,
A.A., red.; NEDOSHIVINA, T.G., red.; SERGEYEV, A.N., tekhn.
red.; BRAYNINA, M.I., tekhn. red.

[Hydrometeorological handbook of the Sea of Azov] Gidrometeoro-
logicheskii spravochnik Azovskogo moria. Pod red. A.A.Aksenova.
Leningrad, Gidrometeoizdat, 1962. 855 p. (MIRA 16:7)

1. Gidrometeorologicheskaya observatoriya Chernogo i Azovskogo
morey.

(Azov, Sea of--Hydrometeorology)

YERMAKOVA, L. P.

1. TYUTYUNNIKOV, B. N., PROF., ERMAKOVA, L. P.

2. USSR (600)

4. Cleaning Compounds

7. Device for determining the detergent action of solutions of cleaning agents.
Masl, zhir. prom. 17, no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

REZNIKOV, D.S., kand. tekhn. nauk; YERMAKOVA, L.S., inzh. (st. Moskva-tovarnaya-Rzhevskaya).

Efficient method of loading packaged freight into boxcars.
Zhel. dor. transp. 37 no.8:73 Ag '55. (MIRA 12:8)
(Railroads--Freight) (Loading and unloading)

SHOSTAKOVSKIY, M.F.; SOKOLOV, B.A.; YERMAKOVA, L.T.

Synthesis of p-chlorophenyltrichlorogermans. Zhur.ob.khim. 32
no.5:1714 My '62. (MIRA 15:5)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya
AN SSSR.

(German)

S/079/62/032/005/009/009
D204/D307

AUTHORS: . Shostakovskiy, M.F., Sokolov, B.A., and Yermakova, L.T.

TITLE: Synthesis of p-chlorophenyl trichlorogermanium (I)

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 5, 1962, 1714

TEXT: The authors carried out, for the first time, a high temperature condensation of HGeCl_3 with p-dichlorobenzene. The mixture, in the ratio 1:1, was passed through a quartz tube 900 mm long and 22 mm in diameter, at 550°C. The condensate, I, was collected in a trap cooled with dry ice, in 11.5 % yield. B.p. 105 - 107°C/5 mmHg; n_D^{20} 2.5738; d_4^{20} 1.6467. Found Cl 47.21 %; calculated Cl 48.81 %. Increasing the HGeCl_3 : p-Cl-C₆H₄-Cl ratio to 2:1 raised the yield to 16 %. Only traces of PhGeCl_3 were obtained when PhCl was substituted in place of ClC₆H₄Cl, under the same conditions. PhGeCl_3 prepared by the Grignard reaction had a b.p. of 80°C/6 mmHg, n_D^{20} .
Card 1/2

Synthesis of p-chlorophenyl ...

S/079/62/032/005/009/009
D204/D307

1.5702, d_4^{20} 1.6641. [Abstractor's note: Essentially complete translation].

ASSOCIATION: Irkutskiy institut organicheskiy khimii sibirskogo ot-deleniya Akademii nauk SSSR (Irkutsk Institute of Organic Chemistry, Siberian Branch of the Academy of Sciences, USSR)

SUBMITTED: October 14, 1961

Card 2/2

ACCESSION NR: AP3001485

S/0077/03/011/005/1696/1696

AUTHOR: Shostakovskiy, K. P.; Solov'ev, N. A.; Konstantin, A. V.; Saltanov, R. O.; Yermakova, I. T.

TITLE: High temperature condensation of fluorohydrocarbons with alkylamines

SOURCE: Zhurnal obshchey khimii, v. 33, no. 5, 1963, 1696

TOPIC TAGS: methylphenyldifluorosilane

ABSTRACT: Methyl difluorohydrosilane was condensed with chlorobenzene at 640 degrees to form methylphenyldifluorosilane.

ASSOCIATION: Irkutskiy institut organicheskoy khimii. Sibirskiy nauchno issledovatel'skiy tsentr.

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001962810006-8

Sciences, USSR)

SUBMITTED: 28Dec62

DATE ACQ: 17Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

Card 1/1

APPROVED FOR RELEASE: 03/14/2001

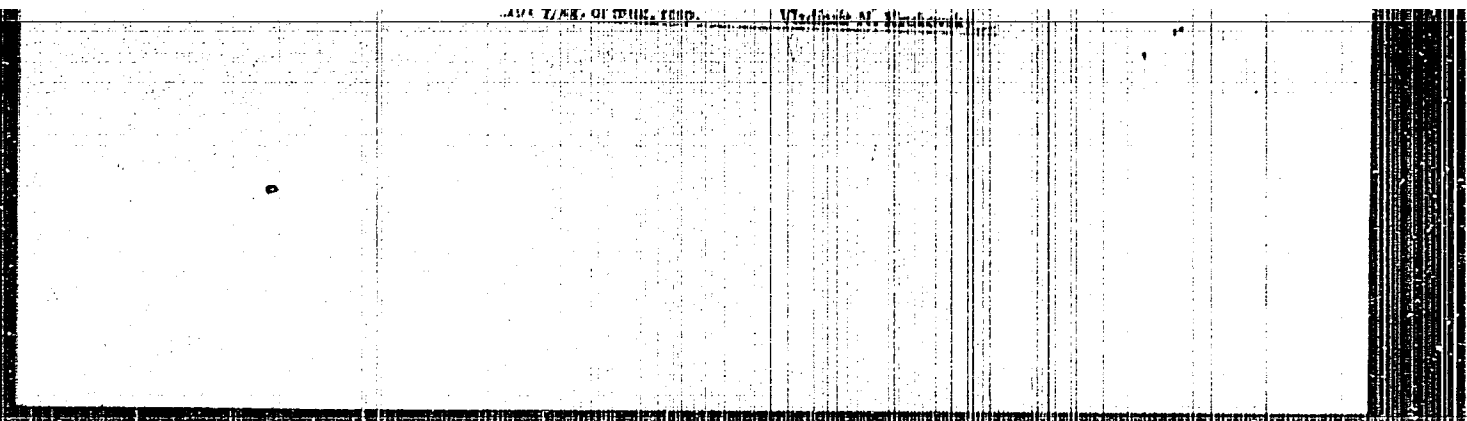
CIA-RDP86-00513R001962810006-8"

YERMAKOVH, M. A.

Vitamin A content of milk. R. Davydov and M. Yermakova (K. A. Timiryazev Agr. Acad., Moscow). *Mil'skhnaya Prom.* 15, No. 6, 32 (1934).—The av. vitamin A content of milk is affected by diet and pasture fertility and

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001962810006-8



APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001962810006-8"

L 22656-65 EPF(c)/EPR/EPA(s)-2/EMP(j)/EMT(m)/T Pz-4/Pz-4/Pz-4/Pz-10 NW
 ACCESSION NR: AT5002136 WW/WLK 2/0000/64/000/000/0207/0272

AUTHOR: Kalabina, A. V.; Grechkin, Ye. F.; Bychkova, T. I.; Filippova, A. Kh.;
 Tyukavkina, N. A.; Yermakova, I. A.

TITLE: Synthesis of some new vinyl-aryl ethers and of their conversion products

SOURCE: AN SSSR. Institut neftekhimicheskogo sinteza. Sintez i svoystva monomerev
 (The synthesis and properties of monomers). Moscow, Izd-vo Nauka, 1964, 267-272

TOPIC TAGS: vinyl aryl ether, aromatic ether, phenol derivative, diphenylpropane
 derivative, diphenolpropane divinyl ether, polyether synthesis, boron trifluoride

ABSTRACT: Studies on the synthesis of vinylaryl ethers were expanded by the prepara-
 tion of new ethers from substituted phenols and of their conversion products to obtain
 highly reactive and readily polymerizing compounds. The compounds reacted to prepare
 vinylaryl ethers included nitro-, chloro-, bromo-, chloronitro-, and ketophenols and
 p,p-dihydroxydiphenylpropane; the reaction products were purified by steam distillation
 or recrystallization. Polymerization was mainly studied with diphenolpropane divinyl
 ether. Its homopolymer, obtained at 60 with boron trifluoride, contains an insoluble
 fraction of crosslinked polymer; its copolymerization with large amounts of vinylphenyl
 ether improves the thermal stability of the product markedly as compared with vinyl-

Card 1/2

L 22656-65
ACCESSION NR: AT5002136

2

phenyl ether homopolymer. Routes for producing di- and trichloroethyl-, and β -chloro- and β , β -dichloro- vinyl-aryl ethers are established. The reactions of vinylaryl ethers with phosphorus pentachloride produce esters and acid chlorides of β -aryloxyvinylphosphonic and thiophosphonic acids. Polymerisation of ethyl β -phenoxylvinyphosphonate gives a non-combustible polymer which does not melt at 380 C. Orig. art. has: 1 formula and 3 tables.

ASSOCIATION: None

SUBMITTED: 30Jul64

ENCL 00

SUB CODE: CC, G

NO REF SOV: 013

OTHER: 003

2/2

DAVIDOV, Ruben Bagdasarovich; GUL'KO, Liya Yefimovna; YERMAKOVA, Mariya
Aleksseyevna; BUKIN, V.N., professor, doktor biologicheskikh nauk,
retsensent; INIKHOV, G.S., professor, doktor khimicheskikh nauk,
retsensent; DEVIYATNIN, V.A., kandidat khimicheskikh nauk, spets-
redaktor; AKIMOVA, L.D., redaktor; CHEBYSHOVA, Ye.A., tekhnichesk-
skiy redaktor

[Principal vitamins in milk and milk products] Osnovnye vitaminy
v moloke i molochnykh produktakh. Moskva, Pishchepromizdat, 1956.
229 p. (MILK) (VITAMINS) (MLRA 9:8)

12
YERMAKOVA, M. A. Cand Agr Sci -- (diss) "Change in the Content of
Caroten^{ene}~~in~~^{and} Vitamins A and E in Milk and Dairy Products ⁱⁿ Feeding
~~of~~^{of} Various ~~Cultures~~^{crops} of ^{Green Conveyer} ~~Vegetable~~ ^{Vegetable}." Mos, 1957. 16 pp 20 cm.
(Mos Order of Lenin Agricultural Academy im K. A. Timiryazev),
110 copies (KL, 25-57, 115-116)

98
-98-

USSR / Farm Animals. Cattle.

Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7321

Author : Yermakova, M. A.

Inst : Moscow Academy of Agriculture imeni K. A. Timiryazev

Title : The Vitamin Composition of Milk and of Milk Products when a Green Conveyer is Used

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva, 1957, vyp. 30, ch. 2, 210-215

Abstract : It is pointed out that when cows are changed to rations with green feeds, the A-vitamin activity of the milk and of milk products increases 3-6 times as compared to the winter period. The most intensive A-vitamin activity of milk and milk products is achieved with

Card 1/2

USSR / Farm Animals. Cattle.

Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7321

clover and Timothy grass feedings, the most
intensive E-vitamin activity of the milk is
obtained with Sudan grass feedings.

Card 2/2

28

YERMAKOVA, M.D.; YAKOVLEVA, Z.Ya.

Spectrum analysis of AZh-9-4 and OTS-5-5-5 bronzes. Zav. lab. 23
no. 5: 592 '57. (MLRA 10:8)

(Bronze--Spectra)

YERMAKOVA, M.D.

FOMINA, O.A.; SMIRNOV, M.S.; YERMAKOVA, M.D.; YAKOVLEVNA, Z.Ya.; GARVILOV, G.A.

Brief reports, Zav. lab, 23 no.5:993 '57. (MLRA 10:8)
(Spectrum analysis) (Metallurgical analysis)

5 (3)

AUTHORS: Postovskiy, I. Ya., Yermakova, M. I. SOV/79-29-4-63/77

TITLE: Synthesis of Some Formasanes, Thiohydrazides, and Thiadiazolines With a Carbohydrate Radical (Sintez nekotorykh formazanov, tiogidrazidov i tiadiazolinov s uglevodnym ostatkom)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 4, pp 1333 - 1340 (USSR)

ABSTRACT: Among the physiologically active heterocyclic compounds those in which the heterocycle is linked to the sugar radical by a straight C-C—bond are very interesting (Refs 1-9). The sulphurous heterocycles are especially interesting among these compounds. Therefore syntheses of some heterocycles with a carbohydrate radical were carried out here, since the publications give only few data (Refs 10-16). The synthesis of some 1,3,4-thiadiazolines which contain in position 5 a carbohydrate radical is described. They were obtained by the reaction of the hydrazides of thialdonic acids (I) which contain a galactose- and arabinose radical with carbonyl compounds according to scheme 1. Formaldehyde, acetone, benzaldehyde, o-methoxybenzaldehyde and furfural were used as carbonyl compounds for the

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Synthesis of Some Formasanes, Thiohydrazides, and
Thiadiazolines With a Carbohydrate Radical

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condensation. Thiohydrazides (I) necessary for the synthesis of the thiadiazolines (II) were reduced with H_2S according to the method of G. Zemlen (Ref 17) by reduction of the formazyl compounds (III) where R' represents a carbohydrate radical (Scheme 2). The formasanes can take part in the reactions in two tautomeric forms (III a) and (III b). If R differs from R' , 4 products are bound to be synthesized according to the scheme, i. e. 2 thiohydrazides and 2 hydrazines. In the case of $R=R'$, however, only one thiohydrazide and one hydrazine are bound to result. In the case of the reduction of the compounds (III), (V), (VII), and (IX) (Table 1) where $R=R'$ the hydrazides of the thiogalactonic- and thioarabonic acid (X), (XI), (XII), and (XIII) (Table 2) were obtained. In the case of the reduction of (IV), (VI), and (VIII), where $R \neq R'$ are different, unexpectedly only one thiohydrazide was obtained with a not substituted aryl, and a substituted aryl hydrazine. Thus the equilibrium shifted in the reaction towards the direction of the "form" \bar{A} which is interesting with respect to the new data on the tautomerism of the asymmetrical formasanes in dependence on the nature of the radicals

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R and R' (Ref 18). The thiohydrazides react smoothly with aldehydes in the hydrochloric acid containing alcohol medium under formation of 1,3,4, thiadiazolines (Table 3) which crystallize easily and are soluble in alcohol, dioxane, and acetone difficultly soluble in benzene and chloroform, insoluble in water. The thiohydrazides and thiadiazolines have a slight antitubercular activity. There are 3 tables and 21 references, 3 of which are Soviet.

ASSOCIATION: Ural'skiy filial Akademii nauk SSSR (Ural Branch of the Academy of Sciences, USSR)

SUBMITTED: March 20, 1958

Card 3/3

YERMAKOVA, M.I.

Some complex-forming compounds of the formazon group. Trudy Inst.-
khim. UFAN SSSR no.4:9-102 '60. (MIRA 16:6)
(Formazan) (Complex compound)

5.3600

78269

SOV/79-30-3-23/69

AUTHORS: ~~Yermakova, M. I., Knylov, Ye. I., Postovskiy, I. Ya.~~

TITLE: Structure of Formazans. Study of the Magnetic Susceptibility of Complex Compounds of Copper, Cobalt, and Nickel With Formazans

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 849-854 (USSR)

ABSTRACT: Complexes of Cu, Co, and Ni were prepared with the following formazans: 1,3,5-triphenylformazan, 1-p-tolyl-3,5-diphenylformazan, 1-p-chlorophenyl-3,5-diphenylformazan, and 1-o-carboxyphenyl-3,5-diphenylformazan. The physical constants of the prepared complexes are shown in Table 1.

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Structure of Formazans. Study of the
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Compounds of Copper, Cobalt, and Nickel
With Formazans

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Table 1. Key: (1) Complex compounds of formazans;
(I) (Bis-1,3,5-triphenylformazyl)-copper; (II)
[Bis-(1-p-tolyl-3,5-diphenylformazyl)]-copper;
(III) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)]-
copper; (IV) 1-o-Carboxyphenyl-3,5-diphenylformazyl-
copper; (V) [(Bis-1,3,5-triphenylformazyl)]-cobalt;
(VI) [Bis-(1-p-tolyl-3,5-diphenylformazyl)]-cobalt;
(VII) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)]-
cobalt; (VIII) (Bis-1,3,5-triphenylformazyl)-nickel;
(IX) [Bis-(1-p-tolyl-3,5-diphenylformazyl)]-nickel;
(X) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)]-
nickel; (XI) (1-o-Carboxyphenyl-3,5-diphenylformazyl)-
nickel; (2) Empirical formula; (3) Mp; (4) Found;
(5) Literature; (6) Nitrogen content (%); (7) Found;
(8) Calculated; (9) Metal content (%); (10) Found;
(11) Calculated.

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Table 1

	2	3		6		9	
		4	5	7	8	10	11
I	$C_{28}H_{30}N_8Cu$	159—160°	158°	17.15	16.92	9.21	9.59
II	$C_{40}H_{34}N_8Cu$	158—159	156	16.01	16.24	9.35	9.20
III	$C_{38}H_{28}N_8Cl_2Cu$	166—168	—	15.38	15.33	8.50	8.69
IV	$C_{20}H_{14}O_2N_4Cu$	231 decomp.	228 decomp.	13.60	13.80	15.47	15.65

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(Table 1 continued)

V	$C_{35}H_{30}N_8Co$	227—228	228—230	17.28	17.04	9.11	8.16
VI	$C_{40}H_{34}N_8Co$	236—237	238	16.37	16.35	8.61	8.50
VII	$C_{38}H_{28}N_8Cl_4Co$	184—185	—	15.19	15.44	8.03	8.11
VIII	$C_{38}H_{30}N_8Ni$	306 decomp.	300 decomp.	17.50	17.05	8.77	8.93
IX	$C_{40}H_{34}N_8Ni$	293 decomp.	287 decomp.	16.42	16.35	8.42	8.56
X	$C_{38}H_{28}N_8Cl_2Ni$	288 decomp.	—	15.12	15.44	7.85	8.04
XI	$C_{20}H_{14}O_2N_4Ni$	275 decomp.	270 decomp.	14.37	13.97	14.82	14.64

Table 2 shows the magnetic susceptibility of the prepared compounds.

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Structure of Formazans. Study of the
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Compounds of Copper, Cobalt, and Nickel
With Formazans

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Table 2. Key: (1) Magnetic susceptibility of complex compounds of formazan with copper, cobalt, and nickel (at the intensity of magnetic field 2260 oersted); (2) Temperature, K; (3) χ Effect (in Bor's magnetones). (I) (Bis-1,3,5-triphenylformazyl)-copper; (II) [Bis-(1-p-tolyl-3,5-diphenylformazyl)] -copper; (III) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)] -copper; (IV) 1-o-Carboxyphenyl-3,5-diphenylformazyl-copper; (V) (Bis-1,3,5-triphenylformazyl)-cobalt; (VI) [Bis-(1-p-tolyl-3,5-diphenylformazyl)] -cobalt; (VII) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)] -cobalt; (VIII) (Bis-1,3,5-triphenylformazyl)-nickel; (IX) [Bis-(1-p-tolyl-3,5-diphenylformazyl)] -nickel; (X) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)] -nickel; (XI) (1-o-Carboxy-3,5-diphenylformazyl) -nickel.

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Structure of Formazans. Study of the
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Table 2

	2	$\chi_g \cdot 10^3$	$\chi_M \cdot 10^3$	$\theta^\circ K$	3
I	293	1.55	1381	} +5	1.81
	196	2.79	2197		
	77	8.00	5652		
II	291	1.62	1494	} +4	1.87
	196	2.80	2303		
	77	8.01	5900		
III	293	2.14	1900	} ---10	2.08
	196	3.35	2822		
	77	8.56	6637		
IV	291	3.37	1557	} +4	1.90
	196	5.22	2303		
	77	14.60	6116		
V	291	1.86	1572	} 0	1.93
	196	3.07	2305		
	77	8.58	5903		

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Structure of Formazans. Study of the
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Compounds of Copper, Cobalt, and Nickel
With Formazans

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(Table 2 continued)

VI	291	2.08	1795	}	0	2.05
	196	3.34	2647			
	77	9.26	6773			
VII	291	2.11	1911	}	0	2.12
	196	3.39	2839			
	77	9.45	7237			
VIII	291	0.273	159			
IX	291	0.279	200			
X	291	0.280	230			
XI	291	0.283	123			

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Structure of Formazans. Study of the
Magnetic Susceptibility of Complex
Compounds of Copper, Cobalt, and Nickel
With Formazans

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SOV/79-30-3-23/69

The measurements of the magnetic susceptibility of the obtained complexes indicate the planar position of the formazyl group structure. There are 2 tables; 2 figures; and 13 references; 3 U.K., 3 German, 2 U.S., 2 Austrian, 1 French, 2 Soviet. The 5 U.S. and U.K. references are: Nineham, A. W., Chem. Revs., 355 (1955); Hunter L., Roberts, C. B., J. Chem. Soc., 822 (1941); Figgis, B. N., Nyholm, R. S., J. Chem. Soc., 12 (1954); Kondo M., Kubo M., J. Phys. Chem., 62, 468 (1958); Bhatnagar, S. S., Khana, M. L., Nevgi, M. B., Philosoph. Mag., 25, 234 (1938).

ASSOCIATION: Institute of Chemistry of the Ural Branch of the
Academy of Sciences of the USSR (Institut khimii
Ural'skogo filiala Akademii nauk SSSR)

SUBMITTED: March 18, 1959
Card 8/8

YERMAKOVA, M.I.; VASIL'YEVA, N.L.; POSTOVSKIY, I.Ya.

N,N'-bis(2-hydroxy-5-sulfophenyl)-C-cyanoformazan as a reagent
for the photometric determination of gallium. Zhur. anal. khim.
16 no. 1:8-13 Ja-F '61. (MIRA 14:2)

1. Institut of Chemistry, Academy of Sciences of the U.S.S.R.,
Ural Branch, Sverdlovsk.

(Gallium—Analysis) (Formazan)

YERMAKOVA, M. I.

Cand Chem Sci - (diss) "Synthesis and properties of several complexing compounds of the formazan group." Sverdlovsk, 1961. 19 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Ural Polytechnic Inst imeni S. M. Kirov); 150 copies; price not given; (KL, 6-61 sup, 197)

VASIL'YEVA, N.L.; YERMAKOVA, M.I.; POSTOVSKIY, I.Ya.

Determination of gallium with N,N-dl(2-hydroxy-5-sulfophenyl)
C-cyanoformazan. Zhur. VKHO 5 no.1:110 '60. (MIRA 14:4)

1. Institut khimii Ural'skogo filiala Akademii nauk SSSR.
(Gallium—Analysis)

S/075/63/018/001/003/010
E071/E452

AUTHORS: Vasil'yeva, N.L., Yermakova, M.I.

TITLE: Use of formazans in analytical chemistry
Communication 2. The determination of gallium
with N,N'-di(2-hydroxyphenyl)-C-cyanformazan

PERIODICAL: Zhurnal analiticheskoy khimii, v.18, no.1, 1963, 43-51

TEXT: A compound N,N'-di(2-hydroxyphenyl)-C-cyanformazan was synthesized and its interaction with gallium studied. Depending on conditions, the formazan forms two blue compounds with absorption maxima at 634 and 630 mμ. The compounds have the nature of internal complexes - nonelectrolytes. The range of existence of one complex is pH 2-5 and that of the other is pH above 5. On the basis of optical properties of solutions, chemical composition, X-ray and dehydration properties of crystalline precipitates as well as equilibria studies in solutions, the probable structure of the compounds is proposed. Depending on the pH of the medium gallium coordinates either with the ionic (pH > 5) or undissociated form of formazan (pH < 5) on changes of pH the compounds undergo a reversible transformation.
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Use of formazans ...

S/075/63/018/001/003/010
E071/E452

The molar ratio of gallium to formazan is 1:1.
N,N'-di(2-hydroxyphenyl)-C-cyanformazan is recommended for the photometric determination of gallium in the presence of aluminium, zinc, lead, cadmium, manganese and small quantities of indium, germanium, copper and nickel. The two last elements are separated from gallium by extraction with benzene. The sensitivity of the reaction is 0.04 µg/ml of gallium. Z.M.Podkina participated in the work. There are 6 figures and 1 table. ✓

ASSOCIATION: Institut khimii Ural'skogo filiala AN SSSR,
Sverdlovsk (Institute of Chemistry, Ural Branch
AS USSR, Sverdlovsk)

SUBMITTED: April 7, 1962

Card 2/2

AID Nr. 995-7 21 June

A FORMAZAN AS A NEW REAGENT FOR THE DETERMINATION OF Zr
(USSR)

Vasil'yeva, N. L., and M. I. Yermakova. Zhurnal analiticheskoy khimii,
v. 18, no. 4, Apr 1963, 545-547. S/075/63/018/004/014/015

A method is proposed which uses N, N'-bis(2-hydroxy-5-sulfohenyl)-C-oxanor-
formazan as the chelating agent in the photometric determination of Zr.

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001962810006-8

Card 1/1

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001962810006-8"

YERMAKOVA, M.I.; POSTOVSKIY, I.Ya.

Chemistry of formazans. Part 7: Reaction with diazonium salts and the aminomethylation of 1,5-diphenylformazan. Zhur. ob. khim. 3/4 no.9:2855-2859 S '64.

(MIRA 17:11)

1. Institut khimii Ural'skogo filiala AN SSSR.

L 10456-67 EWT(1)/EEC(k)-2/EWP(k) IJP(c) WQ/JM

ACC NR: AP6023877

SOURCE CODE: UR/0109/66/011/007/1321/1322

AUTHOR: Golant, M. B., Savel'yev, V. S., Korotkova, Z. S., Alekseyenko, Z. T., Yermakova, M. I. 5/

ORG: none

TITLE: Laser and BW-tube bands overlap

SOURCE: Radiotekhnika i elektronika, v. 11, no. 7, 1966, 1321.-1322

TOPIC TAGS: laser, backward wave tube

ABSTRACT: In 1964, Yeu Ta reported the development of a BW-tube operating at a wavelength of 0.39 mm (Travaux du 5 congress international, Paris, 14-18 Sept, 1964). In the same year H. A. Gebbie et al. reported the development of a laser operating at 0.337 mm (Nature, v. 202, 4933, 685, 1964). In 1965, Soviet researchers designed a BW-tube operating at 0.296 mm. Thus, the laser band and BW-tube band have become overlapped. "The authors wish to thank, N. A. Irisova and Ye. A. Vinogradov for their help in organizing measurements." Orig. art. has: no figure, formula or table.

SUB CODE:20 / SUBM DATE: 21Feb66/ ORIG REF: 002 / OTH REF: 002

Card 1/1 *lmo*

UDC: 621.385.6.029.67+621.370.325

REF ID: A5062702
AUTHOR: ^{44,55}Andrianov, K. A.; ^{44,55}Yermakova, M. N.; ^{44,55}Sablina, G. F. ^{44,55}

ORG: Institute of Macromolecular Compounds, AN SSSR (Institut vysokomolekulyarnykh soyedineniy AN SSSR) ^{44,55}

TITLE: Condensation of borondimethylsiloxane oligomers with tributoxyluminum ⁷

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 10, 1965, 1771-1775

TOPIC TAGS: organoboron compound, organoaluminum compound, oligomer, condensation reaction, high polymer, polymer physical chemistry, polymer structure, plastic deformation, elongation, SILOXANE

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001962810006-8

obtained prior to get information are not cross-linked, and are not

Card 1/2

UDC: 541.64+678.86

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001962810006-8"

YERMAKOV, V.S.; SPIRIN, S.A.; CHIZHOV, D.G.; UGOBETS, I.I.; LAVRENEKO, K.D.;
SMIRNOV, G.V.; CHUPRAKOV, N.M.; MKHITARYAN, S.G.; ASMOLOV, G.L.;
KOTILEVSKIY, A.M.; MOLOKANOV, S.I.; SYROMYATNIKOV, I.A.; FAYERMAN, S.Ts.;
SOKOLOV, B.M.; KOMISSAROV, Yu.P.; MALYUTIN, I.P.; POBEGAYLO, K.M.;
MORYAKOV, A.V.; MELAMED, M.F.; KUMSLASHVILI, P.G.; GARKAVAYA, L.A.;
LIVSHITS, N.M.; NEKRASOV, A.M.

Moisei Vul'fovich Safro; obituary. Elek.sta. 24 no.11:60 N '53.

(MIRA 6:11)

(Safro, Moisei Vul'fovich, ?-1953)

YERMAKOV, V.S.; KLOCHKOV, I.M.; CHIZHOV, D.G.; KOGTEV, G.I.; LAVRENNIKOV, K.D.; NEKRASOV, A.M.; SPIRIN, S.A.; VESHLOV, N.D.; KOTILEVSKIY, D.G.; SMIRNOV, G.Y.; MARINOV, A.M.; MAKSIMOV, A.A.; IVANOV, M.I.; KENOV, A.P.; CHUPRAKOV, N.M.; AVTONOMOV, B.V.; SYROMYATNIKOV, I.A.; MOLOKANOV, S.I.; FAREMAN, S.T.S.; GORSHKOV, A.S.; GOL'DENBERG, P.S.; SOKOLOV, B.M.; MAKUSHKIN, Ya.G.; MKHITARYAN, S.G.; RASSADNIKOV, Ye.I.; GRUDINSKIY, P.G.; POMICHEN, G.I.; SHCHERBININ, B.V.; ZAYTSEV, V.I.; KONOREV, S.V.; KLYUSHIN, M.P.; PRISCHANSKIY, V.I.; SAFRANKUKYAN, G.S.; 1 dr...

IUrii Prokhorovich Komissarov; obituary. Elek.sta. 25 no.5:60 My '54.
(Komissarov, IUrii Prokhorovich, 1910-1954) (MLRA 7:6)

YERMAKOV, V.S.,

According to Lenin's plan. Nauka i zhizn' 22 no.4:5-9 Ap '55.
(Electrification) (MLA 8:6)

1. Zamestitel' ministra elektrostantsiy SSSR.

YERMAKOV, V.S.

PAVLENKO, A.S.; YERMAKOV, V.S.; UGOHNTS, I.I.; SMIRNOV, M.S.; CHIZHOV, D.G.;
KOGTEV, G.I.; BAUSTE, A.Y.; VINTER, A.V.; NEKRASOV, A.M.; LAVRENIENKO,
K.D.; KHYLOV, N.A.; KERTSELLI, L.I.

Sergei TSalikovich Faerman; obituary. A.S.Pavlenko and others.
Elek.str.26 no.10:62 0 '55. (MLRA 8:12)
(Faerman, Sergei TSalikovich, d.1955)

PERVUPHIN, M.G.; LOGINOV, P.G.; ZHIMERIN, D.G.; PAVLENKO, A.S.;
KULEV, I.A.; DONCHENKO, V.I.; DROBYSHOV, A.I.; DMITRIYEV, I.I.;
YERMAKOV, V.S.; SOSNIN, L.A.; PODUSHKIN, A.S.; SMIRNOV, M.S.;
TARASOV, N.Ya.; NIKOL'SKIY, G.P.; KRYLOV, M.A.; KOOTEV, G.I.;
ACHKASOV, D.I.; VASELOV, M.D.; CHIZHOV, D.G.; UGOBETS, I.I.;
NIKIFOROV, P.N.; PLATONOV, N.A.

Vladimir Nikolaevich Sergeev; obituary. Elek. sta. 27 no.3:63 Mr
'56. (MIRA 9:8)

(Sergeev, Vladimir Nikolaevich, 1903-1956)

MALENKOV, G.M.; PERVUKHIN, M.G.; KUCHERENKO, V.A.; ZHIMMERIN, D.G.; LOGINOV,
F.G.; PAVLENKO, A.S.; YERMAKOV, V.S.; VINTER, A.V.; DMITRIYEV, I.I.;
UGORETS, I.I.; BEKHTIN, N.V.; VOZNESENSKIY, A.N.; VASILENKO, P.I.;
BOROVVOY, A.A.; NOSOV, R.P.; KRISTOV, V.S.; BELYAKOV, A.A.; RUSSO,
G.A.; VASIL'YEV, A.F.; RYPKIN, V.P.; THERMAN, I.A.; ORLOV, G.M.;
CHUMACHENKO, N.A.; BESCHINSKIY, A.A.; YAROSH, V.F.

Pavel Pavlovich Laupman; obituary. Gidr. stroi. 26 no.5:62 My '57.
(Laupman, Pavel Pavlovich, 1887-1957) (MLRA 10:6)

YERMAKOV, V.S.

YERMAKOV, V.S.

Plans for developing atomic energy in Britain. Elek.sts. 28
no.10:94-95 '57. (MIRA 10:11)
(Great Britain--Atomic energy)

YERMAKOV, V.S., Cand Tech Sci -- (diss) "Study of
~~the~~ processes of heat transfer in heat-^{generating}~~producing~~
elements of a nuclear reactor." Minsk, 1958, 16
pp (Acad Sci BSSR. Department of Phys Math and Tech
Sci. Inst of Power Engineering) 100 copies (KL, 29-58,
132)

- 53 -

IVANOV, A.V.; YERMAKOV, V.S.

Applying Laguerre polynomials to the solution of telegraphic
equations. Inzh.-fiz.szhur. no.1:6-16 Ja '58. (MIRA 11:7)

1. Institut energetiki AN BSSR, g.Minsk
(Electric circuits) (Calculus, Operational)

YERMAKOV, V.S.

Measuring the flow of neutrons in nuclear reactors. Inzh.-fiz.
zhur. no.2:113-117 F '58. (MIRA 13:1)

1. Institut energetiki AN BSSR, Minsk.
(Neutrons) (Ionisation chambers)

YERMAKOV, V.

AUTHORS: Gel'fond, A., Karandeyev, K., 105-58-4-35/37
Chistyakov, N., Shumilovskiy, N., Levin, M.,
Yermakov, V., Kobrinskiy, N., and others

TITLE: V. N. Mil'shteyn (Deceased)

PERIODICAL: Elektrichestvo, 1958, Nr 4, pp. 94-94 (USSR)

ABSTRACT: Obituary notice. On January 9, 1958 Professor Viktor Naumovich Mil'shteyn, Dr. of Technical Sciences died at the age of 44. After he finished the Moskau Institute for Power Engineering he worked in industry and as pedagogue. In 1938 he became Candidate and in 1945 Dr. of Technical Sciences. Since then he was Director of the Chair for Electric and Automatic Apparatus at the Moskau Institute for Aviation imeni Ordzhonikidze. In 1949 he changed over to the Scientific Research Institutes for Systems at the Committee for Standards, Measures and Measuring Apparatus. At the same time he worked as pedagogue at the Penza Institute for Industry and then at the Moskau Electrotechnical Institute for Telecommunications. He wrote many

Card 1/2

V. N. Mil'shteyn (Deceased)

105-58-4-35/37

publications and many inventions were made by him. His scientific work included the field of theoretical electrical engineering and radio engineering as well as the problems on the theory and the calculation of measuring instruments, automation elements and electromagnetic mechanisms. Before his death he had his monography "The Energetic Relations in Electrical Measuring Instruments" printed. There are 1 figure.

AVAILABLE: Library of Congress

1. Obituary

Card 2/2

YERMAKOV, V. S.

AUTHOR: Yermakov, V.S., Engineer

96-1-24/31

TITLE: Economic Calculations on Feed Water and Steam Piping
(Ekonomicheskiiy raschet pitatel'nykh i parovykh
truboprovodov)

PERIODICAL: Teploenergetika, 1958, Vol.5, No.1, pp. 82 - 83 (USSR).

ABSTRACT: This note gives a brief account of technical and economic considerations in the dimensioning of feed water and steam piping according to British power station design practice. It is taken from the publication "Power Station Auxiliary Plant" by Kennedy and Hutchinson.
There is 1 non-Slavic reference.

AVAILABLE: Library of Congress.
Card 1/1

YERMAKOV, V.S.

Investigating processes of heat transfer in heat producing
elements of nuclear reactors [with summary in English]. Inzh.-fiz.
zhur. no. 9:3-15 S '58. (MIRA 11:10)

1. Institut energetiki AN BSSR, g. Minsk.
(Nuclear reactors)
(Heat--Conduction)

VEYNIK, A.I.; VERMAKOV, V.S.; LYKOV, A.V.

Applying the Onsager theory to the study of the diffusion of
neutrons in absorbing media of nuclear reactors. Inzh.-fiz.
zhurn. no.10:123-129 0 '58. (MIRA 11:11)

1. Institut energetiki AN BSSR, g. Minsk.
(Nuclear reactors) (Nuclear physics)

SOV/98-58-11-6/15

AUTHORS: Yermakov, V.S. and Khanin, M.L., Engineers

TITLE: The Water Power Resources of the Belorussian SSR (Gidro-energeticheskiye resursy Belorusskoy SSR)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 11, pp 28-34 (USSR)

ABSTRACT: The Belorussian Republic has no hydroelectric power plants on its territory. The needs of industry and population are met by thermoelectric power plants, fuelled mainly with peat. The authors find that the planned construction of hydroelectric power plants will solve the power problems of the republic. The possible locations of these plants on the main rivers are enumerated. There are 2 tables, 2 charts, 1 profile and 1 graph.

1. Power plants--USSR

Card 1/1

YERMAKOV, V.S.; IVANOV, A.V.

Investigating the nonstationary heat transfer in heat-producing
elements of nuclear reactors [with summary in English]. Inzh.-
fiz.smur. no.12:96-112 '58. (MIRA 11:12)
(Nuclear reactors)
(Heat--Radiation and transmission)

YERMAKOV, V.S., insh.; PEKELIS, G.B., insh.

Developing the power system of economic regions. Elek. sta. 29
no. 3:2-6 Mr '58. (MIRA 11:5)
(Electric power plants)

YERMAKOV, V.S., insh.; PEKELIS, G.V., insh.

Present-day conditions for the development of peat-operated electric stations. Torf. prom. 35 no.5:1-7 '58. (MIRA 11:10)

1. Gosplan BSSR.
(Electric power plants)

YERMAKOV, V.S.

21(4)

PHASE I BOOK EXPLOITATION

309/2583

International Conference on the Peaceful Uses of Atomic Energy.

2nd, Geneva, 1958.

Baklady sovetskikh yaberykh; yadernyye reaktory i yadernaya energiya (Reports of Soviet Atomic Energy Institute, Moscow, 1958, 707 p. (Series: Itel. Study, vol. 2) Extra slip inserted. 8,000 copies printed.

General Eds.: M.A. Bollehal, Corresponding Member, USSR Academy of Sciences, A.K. Kravin, Doctor of Physical and Mathematical Sciences, A.I. Lopyanakiy, Member, Ukrainian SSR Academy of Sciences, I.I. Brevilov, Corresponding Member, USSR Academy of Sciences, and V.J. Pervov, Doctor of Physical and Mathematical Sciences; Ed.: A.P. Alyab'ev; Tech. Ed.: Ye. I. Masel'.

NOTE: This book is intended for scientists and engineers engaged in reactor designing, as well as for professors and students of higher technical schools where reactor design is taught.

CONTENTS: This is the second volume of a six-volume collection on the peaceful uses of atomic energy. The six volumes contain the reports presented by Soviet scientists at the Second International Conference on Peaceful Uses of Atomic Energy, held from September 1 to 13, 1958 in Geneva. Volume 2 consists of three parts. The first is devoted to atomic power plants under construction in the Soviet Union; the second to experimental and research reactors, the experiments carried out on them, and the work to improve them; and the third, which is predominantly theoretical, to problems of nuclear reactor physics and construction engineering. Yu. I. Masel' is the scientific editor of this volume. See 309/2081 for titles of all volumes of the set. References appear at the end of the articles.

Mostovoy, V.I., V.J. Dikarev, M.M. Yegizarov, and Yu. S. Salytkov. Measuring Neutron Spectra in Uranium Water Lattices (Report No. 2152) 245

Krasin, A.K., B.G. Dubovskiy, M.M. Lentsov, Yu. Yu. Glazkov, E.M. Gushakov, A.V. Kozlov, L.A. Gerasimov, V.V. Vavilov, Yu. I. Yurkin, and A.P. Sushchenkov. Studying the Physical Characteristics of a Beryllium-moderator Reactor (Report No. 2148) 255

Gelatin, A.D., G.A. Mamonovskaya, A.P. Medik, Yu. G. Abey, V.J. Salda, and P.A. Kravchinskiy. Critical Experiment on an Experimental Heavy-water Reactor (Report No. 2038) 270

Marchuk, G.I., V. Ye. Pukhov, Ye. I. Pogudalina, V.V. Smilov, I.P. Tyuterev, S.Y. Fistonova, and G.I. Krushchina. Certain Problems in Nuclear Reactor Physics and Methods of Calculating Them (Report No. 2151) 288

Slavutin, G.V. and V.M. Semenov. Determination of Control Rod Effectiveness in a Cylindrical Reactor (Report No. 2469) 613

Gelfand, I.M., S.M. Fyrborg, A.S. Prolov, and M.M. Chentsev. Using the Method of Successive Approximation for Solving the Kinetic Equation (Report No. 2141) 628

Lelatin, M.I. Neutron Distribution in a Heterogeneous Medium (Report No. 2159) 634

Krasnovskiy, M.V., A.V. Stepanov, and P.L. Shapiro. Neutron Thermalization and Diffusion in Heavy Media (Report No. 2143) 651

Vernik, A.I., V.J. Yermakov, and A.V. Lykov. Using the One-Group Theory for Studying Neutron Diffusion in the Absorbing Media of Nuclear Reactors (Report No. 2224) 668

Broder, D.L., S.A. Burdin, A.A. Butusov, V.V. Levin, and V.V. Orlov. Studying the Spatial and Energy Distribution of Neutrons in Different Media (Report No. 2147) 674

Balirayev, A.B. Neutron Ionization Chambers for Work in Nuclear Reactors (Report No. 2084) 690

Kirillin, V.A., and S.A. Ulybin. Experimental Determination of Specific Volumes of Heavy Water in a Wide Temperature and Pressure Range (Report No. 2471) 696

26.2223

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 5, P. 80, # 10790

AUTHOR:

Yermakov, V.S.

TITLE:

Investigation of the Temperature Field in the Heat Producing Elements of a Nuclear Reactor

PERIODICAL: Tr. In-ta energ. AN BSSR, 1959, No. 9, pp. 92-116

TEXT:

The author considers the heat transfer process in a cylindric four-layer heat producing element. The latter consists of the core element (nuclear fuel), the coupling interlayer, the shell, and the scale layer. At first, the steady process is considered. It is presumed that the heat source power (Q_0) does not depend on r and varies over the rod length according to the cosine law. The temperature of the butt surface of the rod is assumed to be equal to the temperature of the heat carrier. A formula is obtained for the relative temperature drop (Δt) between the core surface and the external surface of the multilayer heat-producing element. The unsteady processes of heat transfer in cylindric rod are considered in case of uniform initial distribution of the rod and constant temperature at the ends of the rod, which is equal to

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A005/A001

Investigation of the Temperature Field in the Heat Producing Element of a Nuclear Reactor

the temperature of the heat carrier. A formula is obtained for Δt^* in general form in case of arbitrary functions $Q(r, z, \tau)$ and $q_s(z, \tau)$ (thermal flux at the lateral surface of the fuel core). The solutions of the problem are considered for specific conditions of heat exchange in the heat producing element of the ВВР - (VVR) reactor (uranium rods with $d = 0.82$ cm with steel claddings of 1 mm thickness; scale does not exist). Nomographs are plotted for practical computations of the steady and unsteady heat exchange. The transient conditions of the reactor operation are studied, when $Q(z, \tau)$ is an exponential time function. A nomograph is plotted convenient for calculating the heat exchange for the emergency conditions of the reactor operation.

B.A. Levin

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

32429

S/020/61/141/006/014/021
B103/B147

15.9201

11.2211

AUTHORS:

Yermakova, I. I., Dolgoplosk, B. A., Corresponding Member
AS USSR, and Kropacheva, Ye. N.

TITLE:

Cis-trans isomerization of the links of 1,4-polybutadiene
under the effect of nitrogen peroxide

PERIODICAL:

Akademiya nauk SSSR. Doklady, v. 141, no. 6, 1961,
1363 - 1365

TEXT: The isomerizing effect of NO_2 and its dimer N_2O_4 , of hexaphenyl
ethane, and of three disulfides was studied on 2% benzene solutions of
a) cis-1,4-polybutadiene, and b) cis-butene-2 in glass ampullas. The
content of 1,2 or trans-1,4 links in the polymer was calculated on the basis
of the intensity in the maxima 909 and 967 cm^{-1} , respectively, of the
infrared spectra (spectra taken by Z. D. Stepanova). The change of the
cis-trans forms of the butenes was recorded chromatographically during the
process (by A. N. Genkin). It has been found that in case a) the cis-links
of the polymer chain are isomerized to trans-links, i. e., the more inten-
Card 1/3

32429

S/020/61/141/006/014/021
B103/B147

Cis-trans isomerization...

sively the higher the NO_2 concentration. Thus, 23.5 mole% of NO_2 results in a polymer with 60% of trans-links. No isomerization occurred at -50°C owing to the tendency of NO_2 to dimerize below 0°C . Isomerization seems to be effected merely by the NO_2 form. At $+96^\circ\text{C}$ as well as at -50°C , NO_2 is added quantitatively to the double bond. The resulting products are insoluble in a hydrocarbon medium. In case b) similar results were obtained. With a NO_2 concentration of 6 mole%, 40% of cis-butene-2 is converted to trans-butene-2 at 90°C within 2.5 hr. The reaction does not reach the equilibrium state, because NO_2 is consumed by the addition. Neither hexaphenyl ethane at $96 - 130^\circ\text{C}$ nor diphenyl-picryl hydrazyl at 20° and 60°C cause structural changes of the chain in case a). The disulfides decomposing into free radicals at 120°C (Refs. 1 - 4, see below) only lead to gel formation without isomerization, one radical being added to the double bond. It is assumed that the isomerization under the effect of RS^\cdot radicals, which is described in Refs. 1 - 4, does not take place owing to their addition to the double bond, but only when an H atom is broken off from the chain. The mercaptan formed in stage 1 takes part in the chain transfer; this results

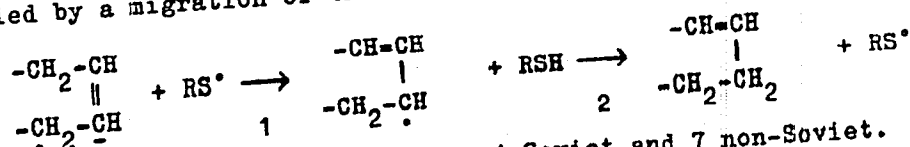
Card 2/3

32129

S/020/61/141/006/014/021
B103/B147

Cis-trans isomerization...

in the regeneration of the RS[•] radicals. Such an isomerization has to be accompanied by a migration of the double bond:



There are 2 figures and 11 references: 4 Soviet and 7 non-Soviet. The four most recent references to English-language publications read as follows: Ref. 1: J. I. Cunneen, F. W. Shipley, J. Polym. Sci., 36, 77 (1959); Ref. 2: J. I. Cunneen et al., Trans. Inst. Rubber Ind., 34, 260 (1959); Ref. 3: J. I. Cunneen, W. F. Watson, J. Polym. Sci., 38, 521 (1959); Ref. 4: J. I. Cunneen, W. F. Watson, ib. 533. ✓

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva (All-Union Scientific Research Institute of Synthetic Rubber imeni S. V. Lebedev)

SUBMITTED: August 18, 1961

Card 3/3

YERMAKOVA, I.I.; KROPACHEVA, Ye.N.; DOLGOFLOSK, B.A., akademik; KOL'TSOV,
A.I., akademik; NEL'SON, K.V.

Interaction of 3-methyl-2-pentene with cation-type catalysts.
Dokl. AN SSSR 159 no.4:835-838 D '64 (MIRA 18:1)

1. Nauchno-issledovatel'skiy institut sinteticheskogo kauchuka
im. S.V. Lebedeva.

IYERUSALIMSKIY, N.D.; ANDREYEVA, Ye.A.; LIROVA, S.A.; YERMAKOVA, I.T.

Hydrocarbon oxidation by yeast. Prikl. biokhim. i mikrobiol.
1 no. 6:601-605 M-D '65. (MIRA 18:12)

1. Institut mikrobiologii AN SSSR. Submitted Jan. 16, 1965.

L 05870-67 EWP(j)/ENT(m) RM/WW/JW
 ACC NR: AP6028898 SOURCE CODE: UR/0079/66/036/008/1419/1420

AUTHOR: Makarov, S. P.; Yermakova, I. V.; Shpanskiy, V. A.

ORG: none

TITLE: Fluorination of liquid acetonitrile with free fluorine

SOURCE: Zhurnal obshchey khimii, v. 36, no. 8, 1966, 1419-1420

TOPIC TAGS: fluorination, acetonitrile, free fluorine, *fluorine*

ABSTRACT: A study has been made of the fluorination of liquid acetonitrile with free fluorine rarefied with nitrogen. The reaction was conducted at 10—15C with vigorous agitation. There were no flares or explosions. Hydrogen fluoride formed in the reaction slowed down fluorination and had to be bound with sodium fluoride. The reaction products were fluoroacetonitrile, difluoroacetonitrile, N-fluoro-1,1-difluoroethylenimine, and N,N-difluoro-1,1-difluoroethylamine. The reactions can be represented as follows:

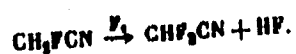
Cord 1/2

UDC: 547.23

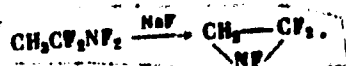
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ACC NR: AP6028898



The cyclic product could have been formed by dehydrofluorination of N,N-difluoro-1,1-difluoroethylamine η



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SUB CODE: 07/ SUBM DATE: 17Jul65/ ORIG REF: 001/ OTH REF: 004

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Card 2/2

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
p 24 (USSR) 15-1957-3-2685

AUTHOR: Yermakova, K. A.

TITLE: New Species of Vesicular Tetracorals (Novyye vidy puzyr-
chatykh korallov rugoza)

PERIODICAL: Tr. Vses. n-i. geol-razved. nef. in-ta, 1956, Nr 7,
pp 31-36

ABSTRACT: The author describes in detail the following species
from Middle Devonian (Givetian) rocks on the western
slope of the northern Urals: Lythophyllum aequivesicu-
lare sp. n. and L. acutum sp. n. (of the family Cysti-
phyllidae Roem., subfamily Lythophyllinae Wdkd.). The
paper has one table.

Card 1/1

YERMAKOVA, K.A.

Tetracoralla and Tabulata of the Russian Platform. *Biul.MOIP.*
Otd.geol. 31 no.4:110-111 J1-Ag '56. (MLRA 9:12)

(Russian Platform--Corals, Fossil)

YERMAKOVA, K.A.

New species of Devonian rugosa corals from central provinces of
the Russian Platform. Trudy VNIIGI no.8:160-191 '57.
(MIRA 12:2)

(Russian Platform--Rugosa)

YERMAKOVA, K.A.

Some species of Devonian coelenterates from central and eastern
areas of the Russian Platform. Trudy VNIIGI no.16:69-105
'60. (MIRA 13:6)
(Russian Platform--Coelenterata, Fossil)

YERMAKOVA, K. A., Cand Geol-Min Sci -- (diss) "Devonian corals of the Russian Platform and of Timan." Leningrad, 1960. 14 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Leningrad Mining Inst im G. V. Plekhanov); 200 copies; price not given; (KL, 17-60, 144)

YERMAKOVA, K.A.

Paleozoogeographic regionalization of the Kifai Sea of the
Russian Platform. Biul. MOIP Otd. geol. 40 no. 6:149 M-D '65.

1. Submitted May 7, 1965.

REZANOV, I.A.; NCA) TKHYONG SHAN; SHEYNMANN, Yu.M.; RATS, M.V.; KRUG, O.Yu.;
 ZYRYANOV, V.N.; RAKCHEYEV, A.D.; YAKOVLEVA, Ye.B.; PETROVA, M.A.;
 PETHOV, Yu.I.; KUZNETSOV, Ye.A.; YUDINA, V.V.; BARDINA, N.Yu.;
 SIMANOVICH, I.M.; ATANSYAN, S.V.; SERGEYEVA, A.M.; PARFENOV, S.I.;
 RUTKOVSKI, Yatssek [Rutkowski, Jacek]; MAKHLINA, M.Kh.; ZVEREV, V.P.;
 TERNOVSKAYA, V.T.; SAMOYLOVA, R.B.; YERMAKOVA, K.A.; BYKOVA, N.K.;
 MEYKEN, S.V.; BARSKOV, I.S.; IL'INA, L.B.; BABANOVA, L.I.;
 DOLITSKAYA, I.V.; GORBACH, L.P.; BUTS'KO, S.S.; TRESKINSKIY, S.A.;
 SVOZDETSKIY, N.A.; PRYALVKHINA, A.F.; GROSVAL'D, M.G.; MODEL', Yu.M.;
 GORYAINOVA, I.N.; MEDVEDEVA, N.K.; MYALO, Ye.G.; DOBROVOL'SKIY, V.V.;
 KHOROSHILOV, P.I.; CHIKISHEV, A.G.

Brief news. Biul. MOIP. Otd. geol. 40 no.3:122-154 My-Je '65.
 (MIRA 18:8)

YERMAKOVA, K.A.

Some Middle Devonian corals of the Ural region. (MIRA 18:1)

UNION no.43:94-123 '64

YERMAKOVA, K. G.

GENREL', P.A.; ANDREYEVA, I.N.; YERMAKOVA, K.G.; TSVETKOVA, I.V.

Effect of the new tillage system on the basic features in the
physiology of wheat. Izv. AN SSSR. Ser.biol. no.4:448-465 J1-Ag '57.
(MLRA 10:8)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva Akademii nauk
SSSR.

(TILLAGE) (WHEAT)

<p>CA YERMAKOVA, K.I.</p>		<p>107 AND 108 SERIES CONCISE AND REPERTORY NEWS</p>	
<p>THE COST AND THE HOT STAGE OF METAL OXIDE. K. I. Yermakova, A. P. Hornelov and M. S. Nishan. <i>Acta Physicochim. U. R. S. S. R.</i> 13, 679-700 (1959) (in English). -- The initial reaction velocity for the reaction $\text{Me}_2\text{O} + \text{O}_2$ at 220-280° and $p = 60-80$ mm. is given by an eq. $\log v = \log v_0 - 4000/T$. From data on the induction period for the various regions of onset and hot flame formation, the equation $v(p - p_0)^n = \text{const.}$ is found applicable with $n = \text{induction period and } n = 1.1$ for metal, with pure O_2 and 1.5 for air at 280°. The temp. dependence is given by $v \propto T^{\gamma/10}$ with $\gamma = 3000$. For Me_2O, the boundary curve between the regions of slow and explosive burning, is given by $\log p = (A/T) + B$ with $A = 2800$. Addn. of Me_2O (up to 3 mm.) to Me_2O salts. decreases the induction period; the equation $v = (1/\delta) \cdot [\ln((n_0/\delta)) + \{p/\delta\}]$ in $n = [1 + (n_0/\delta)]$ holds as in the case of butane. (C. A. B. 4059, 4060, 5017) with $n_0 = \text{crit. concn. of accumulated peroxide} = 3 \text{ mm. at } 245^\circ, 3 \text{ mm. at } 280^\circ; \delta = 1.5 \text{ at } 245^\circ, 2.5 \text{ at } 280^\circ; \delta = \text{coeff. of utilization of the peroxide} = 1, \text{ and } n = \text{concn. of peroxide. For the addn. of } \text{Me}_2\text{O} \text{ to } \text{Me}_2\text{O}, \delta = 1; \text{ to butane } \delta \approx 0.01. \text{ (Cf. also preceding abstract.)}$</p>		<p>P. H. Rothmann</p>	
<p>ASTM-ILA METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>10000 DIVISION</p>		<p>10000 HLP DIV 501</p>	
<p>10000 01</p>		<p>10000 01</p>	

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1. YERMAKOVA, K. I.; YERMOLOVA, A.P.; NEYMAN, M. B.

2. USSR (600)

"Research on the Conditions of the Combustion of Gaseous Mixtures — XV.
The Cold and Hot Flames of Methyl Ether", Zhur. Fiz. Khim 13, No 12, 1939. Leningrad
Inst. of Chemical Physics, Lab of the Oxidation of Hydrocarbons.
Received 26 July 1939.

9. Report - U-1615, 3 Jan. 1952.

<p>3470 On the Disintegration of Boron by Cosmic Rays. A. P. Zhdanov and K. I. Ermsbom. <u>Doklady Akad. Nauk S.S.S.R.</u> 70, 211-14(1960)(in Russian). The authors point out that the use of thick photographic emulsions for the study of nuclear disintegrations has been</p>	
<p>introduced by the Russian Myosovskii (Z. Physik 44, 406 (1937)). The present paper describes an improvement of this method, which removes the uncertainty as to the nature of the atom that has undergone a disintegration. During the preparation of an emulsion, a suspension of an element, e.g., boron, is introduced, all the suspension grains being conspicuously larger than the other grains that will appear in the developed photographic emulsion; in this way a star, whose prongs emerge from a boron grain, will certainly represent a disintegration of a B atom. Photographs of several such stars, produced by cosmic rays, are given and discussed. One of them, exhibiting four prongs, is interpreted as $\pi^- + p^+ \rightarrow n^0 + \mu^+$. In a new reaction type, showing a capture of a slow negative particle and a liberation of a lighter positive meson.</p>	
<p>Introduced by the Russian Myosovskii (Z. Physik 44, 406 (1937)). The present paper describes an improvement of this method, which removes the uncertainty as to the nature of the atom that has undergone a disintegration. During the preparation of an emulsion, a suspension of an element, e.g., boron, is introduced, all the suspension grains being conspicuously larger than the other grains that will appear in the developed photographic emulsion; in this way a star, whose prongs emerge from a boron grain, will certainly represent a disintegration of a B atom. Photographs of several such stars, produced by cosmic rays, are given and discussed. One of them, exhibiting four prongs, is interpreted as $\pi^- + p^+ \rightarrow n^0 + \mu^+$. In a new reaction type, showing a capture of a slow negative particle and a liberation of a lighter positive meson.</p>	
<p>Revised Inst. - Dept. Chem. Sci. - AS USSR</p>	
<p>RESEARCH LITERATURE CLASSIFICATION</p>	
<p>RESEARCH LITERATURE CLASSIFICATION</p>	

YERMAKOVA, K.I.

20-6-11/48

AUTHORS: Zhdanov, A.P., Berkovich, I.B., Yermakova, K.I., Lapekhin, F.G., Skirda, N.V., ~~Nichalova~~, Z. S...

TITLE: An Interaction of High Energy Particles with Nuclei (O vzaimodeystvii chastits vysokoy energii s yadrami)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 115, Nr 6, pp. 1093 - 1096 (USSR)

ABSTRACT: The present paper describes the provisional results of the analysis of seven rays with relatively great number of shower particles, which were produced in the interaction with emulsion nuclei. When inspecting one particle of the staple of Ilford G-5 emulsions (Il'ford G-5), which was irradiated for seven hours in a height of about 30 km, the authors chose that irradiation which was produced by neutral and charged particles. When analysing these cases rather reliable data were obtained only on the number of shower particles and on the angular distribution of which. The angles between the direction of motion of the primary particle and the traces of the secondary particle were measured by the coordinate-method by the aid of the microscope MBI-8. The characteristics of these distributions are compared in a table. The authors graphically represented

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20-6-11/48

An Interaction of High Energy Particles with Nuclei

the dependence $(1/N) \int H(\theta) d\theta$ on θ . All rays were subdivided into three types. The rays of the first type, which are characterized by a narrow cone, have a symmetrical integral distribution. The rays with a considerably larger cone and a higher number of charged particles belong to the second type. A further diagram illustrates the angular distribution for such ray in which not even within the range of small angles a symmetry can be ascertained. Each theoretical investigation of the mechanism of producing elementary particles starts from the symmetrical flying off of the developed particles in the center-of-gravity system. This corresponds to a certain symmetry of the angular distribution in the laboratory system. This symmetry is actually observed in the element. The most essential statements of the theory of Fermi-Landau can be applied to these cases. There are 4 figures, 2 tables and 8 references, 3 of which are Slavic.

Card 2/3

20-6-11/48

An Interaction of High Energy Particles with Nuclei

ASSOCIATION: Radium-Institute imeni V.G. Khlopin, AN USSR
(Radiyevyy institut im. V.G. Khlopina Akademii nauk SSSR)

PRESENTED: April 4, 1957, by A.F. Ioffe, Academician

SUBMITTED: March 26, 1957

AVAILABLE: Library of Congress

Card 3/3

YERMAKOVA, L. A.

8/181/60/002/04/25/034
B002/B063

14.7700

AUTHORS: Koptsik, V. A., Yermakova, L. A.

TITLE: Investigation of the Temperature Dependence of Electric and Elastic Parameters of Cancrinite

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 4, pp. 697-700

TEXT: In an earlier paper (Ref. 2), the dielectric constant ϵ , as well as the piezoelectric and elastic moduli of cancrinite had been determined at room temperature. In the present paper, the authors determine its behavior between $+20^{\circ}\text{C}$ and -140°C . The temperature was measured with an accuracy of 0.2°C , the dielectric, piezoelectric, and elastic coefficients with an accuracy of 4, 9, and 3%, respectively. The same samples were used, that had served for earlier published determinations. To be true, there occurred deviations which are explained by the aging in one year. Three different sections were examined (Figs. 2, 3, and 4). At low temperatures, anomalies occur in ϵ and the piezoelectric moduli; the precise position is dependent on the orientation of the cut. The anomalous dielectric behavior of cancrinite can be explained by the structure (Fig. 1): According to

Card 1/2

Investigation of the Temperature Dependence
of Electric and Elastic Parameters of
Cancrinite

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B002/B063

V. A. Ioffe and I. S. Yanchevskaya, this anomaly corresponds to a resonance absorption at 180 kilocycles; it is possibly the consequence of an electron transition in the aluminum oxygen tetrahedron from one oxygen atom to another. The piezoelectric anomalies are apparently related to the dielectric ones. These conclusions are only provisional, an accurate investigation requires a better structural determination and an investigation on synthetic material. There are 4 figures and 6 references: 5 Soviet and 1 French.

ASSOCIATION: MGU, fizicheskiy fakul'tet
(Moscow State University, Department of Physics)

SUBMITTED: May 22, 1959

Card 2/2

9.5110 (aka 10.55, 1072)

20714

S.4800

1043, 1137, 1273

S/120/61/000/001/057/062
E194/E184

AUTHORS: Koptsik, V.A., Strukov, B.A., and Yermakova, L.A.

TITLE: A Precision Laboratory Cryostat for Investigating the Electrical and Elastic Properties of Crystals

PERIODICAL: Pribery i tekhnika eksperimenta, 1961, No.1, pp.184-188

TEXT: Progress in the development of laboratory cryostats is briefly reviewed. A circuit developed by B.N. Vasil'yev which was a further development of one used by Wilson and Stone (Ref.9) was used in constructing a precision laboratory cryostat for investigating the electrical and elastic properties of crystals in the region of polymorphous phase conversions. The apparatus was required to produce stable temperature points every 0.1-0.2 °C; the stabilisation of the temperature should be within ± 0.005 °C for a time of 30 minutes to one hour; the specimens should be maintained in vacuum or in an atmosphere of dry gas; electrical terminals in the thermostat chamber should be so designed as to ensure the complete absence of temperature gradients. The equipment consists of a cryostat, a temperature stabilising circuit, a vacuum system and a potentiometer circuit for

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S/120/61/000/001/057/062
E194/E184

A Precision Laboratory Cryostat for Investigating the Electrical and Elastic Properties of Crystals

temperature measurement. The thermostat chamber of the cryostat consists of a copper block (9 in Fig.1), 180 mm high and 45 mm in diameter. In the cylinder are drilled two cylindrical ducts over three quarters of its length. One duct is used for thermocouples and the other for ampoules with specimens. The outer surface of the cylinder is threaded with a four start thread; two of the grooves contain nichrome wire heaters and the other two platinum resistance thermometers. The heater resistance is 1 kilohm and the thermometer resistance is 300 ohms. Under conditions of automatic control the surface of the copper block is maintained at a constant temperature. Because of the good thermal conductivity of the copper, after an interval of 10-15 minutes the same temperature is established in the volume for the test specimen. The copper block 9 covered with an aluminium screen 10 is placed in a cylindrical glass vessel with double walls. The inner space is connected to a vacuum flask containing liquid nitrogen. The temperature sensitive element is the platinum resistance

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E194/E184

A Precision Laboratory Cryostat for Investigating the Electrical and Elastic Properties of Crystals

thermometer would on the copper block and connected in a balanced bridge circuit, the other arms of which are manganese resistances and an inductionless resistance box. When the resistance of the platinum thermometer alters, it alters the phase of the output signal from the bridge and the function of the rest of the circuit is to apply the necessary amount of heat to the heater to maintain the resistance of the platinum thermometer equal to that of the resistance box. A schematic diagram of the control system is given in Fig.2 and the method of operation is explained. The vacuum system consists of two main parts, one of which is used to evacuate the inner cylinder of the cryostat and the other to pump from the glass ampoule with specimen holder. The system includes a rotary vacuum pump, an oil vapour trap and appropriate valves and pressure measuring devices. The required temperature is obtained and maintained as follows. The copper block with the ampoule is placed in the inner vacuum flask of the cryostat. Liquid nitrogen is poured into the outer flask in which the level of nitrogen is

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A Precision Laboratory Cryostat for Investigating the Electrical and Elastic Properties of Crystals

automatically maintained. Cooling commences at a rate of about 0.5 °C/min. When within 3 to 4° of the temperature required to stabilise, the inner vacuum flask is evacuated until the pressure in it reaches 10^{-3} mm Hg, then the rate of cooling rapidly diminishes. The bridge is then balanced by means of the resistance blocks. The automatic temperature control circuit is then connected and any further reduction in temperature takes place in steps controlled by the resistance blocks. The accuracy of stabilisation was checked by measuring the e.m.f. of a triple copper constantan thermocouple with a sensitivity of 0.1 mV/°C. During 60 minutes the temperature changed by less than 0.005 °C. The cryostat has been working for two years and temperature characteristics of a number of crystals have been obtained. Gratitude is expressed to B.N. Vasil'yev for useful suggestions and to A.F. Solov'yev for help in setting up the circuit. There are 3 figures and 13 references: 5 Soviet and 8 English.

Card 4/7

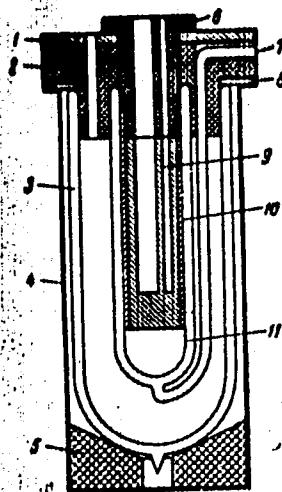
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S/120/61/000/001/057/062
E194/E184

A Precision Laboratory Cryostat

Legend to Fig. 1:

- 1 - Textolite cover;
- 2 - Porous Plastic Cover;
- 3 - Outer Flask;
- 4 - Protective Tin Casing;
- 5 - Wooden Block;
- 6 - Ebonite Stopper;
- 7 - Glass Connecting Pipe
(to Pump);
- 8 - Rubber Ring;
- 9 - Copper Block;
- 10 - Aluminium Screen;
- 11 - Inner Glass Flask;



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A Precision Laboratory Cryostat ...

S/120/61/000/001/057/062
E194/E184

ASSOCIATION: Fizicheskiy fakul'tet MGU
(Physics Division of MGU)

SUBMITTED: December 30, 1959

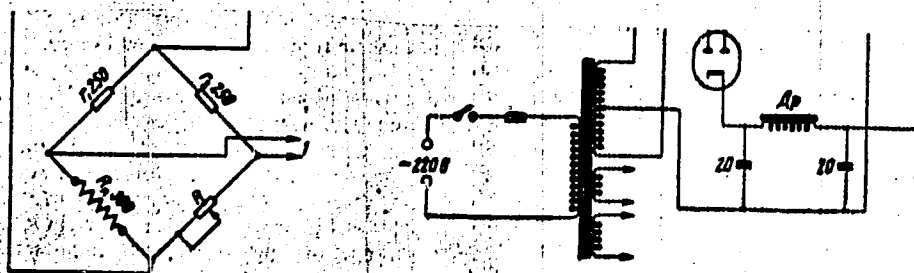


Fig. 2 continued

Card 7/7

KOPTSIK, V.A.; STRUKOV, B.A.; YERMAKOVA, L.A.

Precision cryostat for studying electric and elastic properties of
crystals in laboratories. Prib. i tekhn. eksp. 6 no.1:184-188
Ja-F '61. (MIRA 14:9)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.
(Cryostat)

HUZILOV, Yu.T., kand. ekon. nauk; Prinimali uchastiye: YERMAKOVA, L.A.; RESHETNIKOV, V.A.; RESHETNIKOVA, L.V.; RUMLEVA, K.I.; SAMOYLOV, N.P.; SERGEYEVA, V.S., red.; TIKHONOVA, Ye.M., red.

[Manual for establishing work norms and wages in livestock farming] Spravochnik po normirovaniu i oplate truda v zhivotnovodstve. Moskva, Kolos, 1964. 326 p.
(MIRA 18:8)

PRISTUPLYUK, N.I.; STEPICHEVA, V.V.; YERMAKOVA, L.D.

Changes in the strength of inserts made of an exothermic mixture
during their storage. Lit. proizv. no.4:46-47 Ap '62. (MIRA 15:4)

(Risers (Founding))

CHERNYSHEV, M.P.; ROZHKOV, L.P.; SHUL'GINA, Ye.F.; IGNATOVICH, A.F.;
LABUNSKAYA, L.S.; FOMINA, T.V.; CHERNYAKOVA, A.P.; SHEPAKOVA,
L.N.; TARASOVA, M.K.; ANFILATOVA, A.I.; SLAVIN, L.B.;
BARYSHEVSKAYA, G.I.; DERIGLAZOVA, N.V.; MATUSHEVSKIY, G.V.;
AL'TMAN, E.N.; KROPACHEV, L.N.; CHEREDILOV, B.F.; POTAPOV,
A.T.; DUDCHIK, M.K.; REGENTOVSKIY, V.S.; YERMAKOVA, L.F.;
SEMEKOVA, Ye.A.; KULIKOVSKIY, I.I.; KIRYUKHIN, V.G.; ANSENOV,
A.A., red.; NEDOSHIVINA, T.G., red.; SERGEYEV, A.N., tekhn.
red.; BRAYNINA, M.I., tekhn. red.

[Hydrometeorological handbook of the Sea of Azov] Gidrometeoro-
logicheskii spravochnik Azovskogo moria. Pod red. A.A.Aksenova.
Leningrad, Gidrometeoizdat, 1962. 855 p. (MIRA 16:7)

1. Gidrometeorologicheskaya observatoriya Chernogo i Azovskogo
morey.

(Azov, Sea of--Hydrometeorology)

YERMAKOVA, L. P.

1. TYUTYUNNIKOV, B. N., PROF., ERMAKOVA, L. P.

2. USSR (600)

4. Cleaning Compounds

7. Device for determining the detergent action of solutions of cleaning agents.
Masl, zhir. prom. 17, no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

REZNIKOV, D.S., kand. tekhn. nauk; YERMAKOVA, L.S., inzh. (st. Moskva-tovarnaya-Rzhevskaya).

Efficient method of loading packaged freight into boxcars.
Zhel. dor. transp. 37 no.8:73 Ag '55. (MIRA 12:8)
(Railroads--Freight) (Loading and unloading)

SHOSTAKOVSKIY, M.F.; SOKOLOV, B.A.; YERMAKOVA, L.T.

Synthesis of p-chlorophenyltrichlorogermans. Zhur.ob.khim. 32
no.5:1714 My '62. (MIRA 15:5)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya
AN SSSR.

(German)

S/079/62/032/005/009/009
D204/D307

AUTHORS: . Shostakovskiy, M.F., Sokolov, B.A., and Yermakova, L.T.

TITLE: Synthesis of p-chlorophenyl trichlorogermanium (I)

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 5, 1962, 1714

TEXT: The authors carried out, for the first time, a high temperature condensation of HGeCl_3 with p-dichlorobenzene. The mixture, in the ratio 1:1, was passed through a quartz tube 900 mm long and 22 mm in diameter, at 550°C. The condensate, I, was collected in a trap cooled with dry ice, in 11.5 % yield. B.p. 105 - 107°C/5 mmHg; n_D^{20} 2.5738; d_4^{20} 1.6467. Found Cl 47.21 %; calculated Cl 48.81 %. Increasing the HGeCl_3 : p-Cl-C₆H₄-Cl ratio to 2:1 raised the yield to 16 %. Only traces of PhGeCl_3 were obtained when PhCl was substituted in place of ClC₆H₄Cl, under the same conditions. PhGeCl_3 prepared by the Grignard reaction had a b.p. of 80°C/6 mmHg, n_D^{20} .
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Synthesis of p-chlorophenyl ...

S/079/62/032/005/009/009
D204/D307

1.5702, d_4^{20} 1.6641. [Abstractor's note: Essentially complete translation].

ASSOCIATION: Irkutskiy institut organicheskiy khimii sibirskogo ot-deleniya Akademii nauk SSSR (Irkutsk Institute of Organic Chemistry, Siberian Branch of the Academy of Sciences, USSR)

SUBMITTED: October 14, 1961

Card 2/2

ACCESSION NR: AP3001485

S/0077/03/011/005/1696/1696

AUTHOR: Shostakovskiy, K. P.; Solov'ev, N. A.; Konstantin, A. V.; Saltanov, R. O.; Yermakova, I. T.

TITLE: High temperature condensation of fluorohydrocarbons with alcohols

SOURCE: Zhurnal obshchey khimii, v. 33, no. 5, 1963, 1696

TOPIC TAGS: methylphenyldifluorosilane

ABSTRACT: Methyl difluorohydrosilane was condensed with chlorobenzene at 640 degrees to form methylphenyldifluorosilane.

ASSOCIATION: Irkutskiy institut organicheskoy khimii. Sibirskiy nauchno-issledovatel'skiy tsentr.

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001962810006-8

Sciences, USSR)

SUBMITTED: 28Dec62

DATE ACQ: 17Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

Card 1/1

APPROVED FOR RELEASE: 03/20/2001

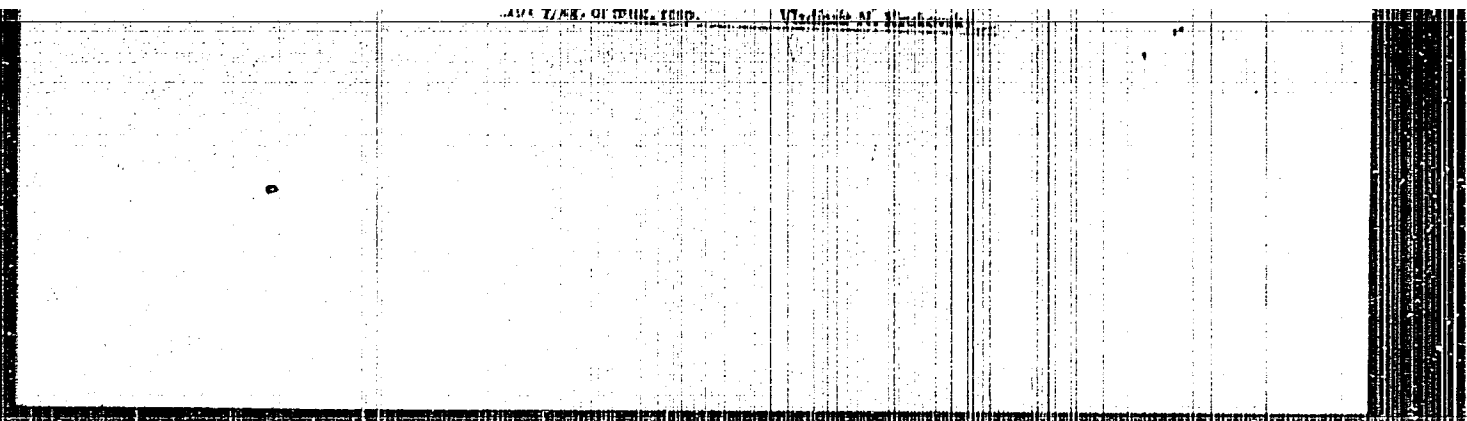
CIA-RDP86-00513R001962810006-8"

YERMAKOVH, M. A.

Vitamin A content of milk. R. Davydov and M. Yermakova (K. A. Timiryazev Agr. Acad., Moscow). *Mil'skhnaya Prom.* 15, No. 6, 32 (1934).—The av. vitamin A content of milk is affected by breed and pasture feeding and

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001962810006-8



APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001962810006-8"

L 22656-65 EPF(c)/EPR/EPA(s)-2/EMP(j)/EMT(m)/T Pz-4/Pz-4/Pz-4/Pz-10 NW
 ACCESSION NR: AT5002126 WU/WLK 2/0000/64/000/000/0207/0272

AUTHOR: Kalabina, A. V.; Grechkin, Ye. F.; Bychkova, T. I.; Filippova, A. Kh.;
 Tyukavkina, N. A.; Yermakova, I. A.

TITLE: Synthesis of some new vinyl-aryl ethers and of their conversion products

SOURCE: AN SSSR. Institut neftekhimicheskogo sinteza. Sintez i svoystva monomerev.
 (The synthesis and properties of monomers). Moscow, Izd-vo Nauka, 1964, 267-272

TOPIC TAGS: vinyl aryl ether, aromatic ether, phenol derivative, diphenylpropane
 derivative, diphenolpropane divinyl ether, polyether synthesis, boron trifluoride

ABSTRACT: Studies on the synthesis of vinylaryl ethers were expanded by the prepara-
 tion of new ethers from substituted phenols and of their conversion products to obtain
 highly reactive and readily polymerizing compounds. The compounds reacted to prepare
 vinylaryl ethers included nitro-, chloro-, bromo-, chloronitro-, and ketophenols and
 p,p-dihydroxydiphenylpropane; the reaction products were purified by steam distillation
 or recrystallization. Polymerization was mainly studied with diphenolpropane divinyl
 ether. Its homopolymer, obtained at 60 with boron trifluoride, contains an insoluble
 fraction of crosslinked polymer; its copolymerization with large amounts of vinylphenyl
 ether improves the thermal stability of the product markedly as compared with vinyl-

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L 22656-65
ACCESSION NR: AT5002136

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phenyl ether homopolymer. Routes for producing di- and trichloroethyl-, and β -chloro- and β , β -dichloro- vinyl-aryl ethers are established. The reactions of vinylaryl ethers with phosphorus pentachloride produce esters and acid chlorides of β -aryloxyvinylphosphonic and thiophosphonic acids. Polymerisation of ethyl β -phenoxylvinyphosphonate gives a non-combustible polymer which does not melt at 380 C. Orig. art. has: 1 formula and 3 tables.

ASSOCIATION: None

SUBMITTED: 30Jul64

ENCL 00

SUB CODE: CC, G

NO REF SOV: 013

OTHER: 003

2/2

DAVIDOV, Ruben Bagdasarovich; GUL'KO, Liya Yefimovna; YERMAKOVA, Mariya
Aleksseyevna; BUKIN, V.N., professor, doktor biologicheskikh nauk,
retsensent; INIKHOV, G.S., professor, doktor khimicheskikh nauk,
retsensent; DEVIYATNIN, V.A., kandidat khimicheskikh nauk, spets-
redaktor; AKIMOVA, L.D., redaktor; CHEBYSHOVA, Ye.A., tekhnichesk-
skiy redaktor

[Principal vitamins in milk and milk products] Osnovnye vitaminy
v moloke i molochnykh produktakh. Moskva, Pishchepromizdat, 1956.
229 p. (MILK) (VITAMINS) (MLA 9:8)

11
YERMAKOVA, M. A. Cand Agr Sci -- (diss) "Change in the Content of
Caroten^{ene}~~in~~^{and} Vitamins A and E in Milk and Dairy Products ⁱⁿ Feeding
~~Cattle With~~^{of} Various ~~Cultures~~^{crops} of ^{Green Conveyer} ~~Vegetable~~ ^{Vegetable}." Mos, 1957. 16 pp 20 cm.
(Mos Order of Lenin Agricultural Academy im K. A. Timiryazev),
110 copies (KL, 25-57, 115-116)

98
-98-

USSR / Farm Animals. Cattle.

Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7321

Author : Yermakova, M. A.

Inst : Moscow Academy of Agriculture imeni K. A. Timiryazev

Title : The Vitamin Composition of Milk and of Milk Products when a Green Conveyer is Used

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva, 1957, vyp. 30, ch. 2, 210-215

Abstract : It is pointed out that when cows are changed to rations with green feeds, the A-vitamin activity of the milk and of milk products increases 3-6 times as compared to the winter period. The most intensive A-vitamin activity of milk and milk products is achieved with

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USSR / Farm Animals. Cattle.

Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7321

clover and Timothy grass feedings, the most
intensive E-vitamin activity of the milk is
obtained with Sudan grass feedings.

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28

YERMAKOVA, M.D.; YAKOVLEVA, Z.Ya.

Spectrum analysis of AZh-9-4 and OTS-5-5-5 bronzes. Zav. lab. 23
no. 5: 592 '57. (MLRA 10:8)

(Bronze--Spectra)

YERMAKOVA, M.D.

FOMINA, O.A.; SMIRNOV, M.S.; YERMAKOVA, M.D.; YAKOVLEV, Z.Ya.; GARVILOV, G.A.

Brief reports, Zav. lab, 23 no.5:993 '57. (MLRA 10:8)
(Spectrum analysis) (Metallurgical analysis)

5 (3)

AUTHORS: Postovskiy, I. Ya., Yermakova, M. I. SOV/79-29-4-63/77

TITLE: Synthesis of Some Formasanes, Thiohydrazides, and Thiadiazolines With a Carbohydrate Radical (Sintez nekotorykh formazanov, tiogidrazidov i tiadiazolinov s uglevodnym ostatkom)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 4, pp 1333 - 1340 (USSR)

ABSTRACT: Among the physiologically active heterocyclic compounds those in which the heterocycle is linked to the sugar radical by a straight C-C—bond are very interesting (Refs 1-9). The sulphurous heterocycles are especially interesting among these compounds. Therefore syntheses of some heterocycles with a carbohydrate radical were carried out here, since the publications give only few data (Refs 10-16). The synthesis of some 1,3,4-thiadiazolines which contain in position 5 a carbohydrate radical is described. They were obtained by the reaction of the hydrazides of thialdonic acids (I) which contain a galactose- and arabinose radical with carbonyl compounds according to scheme 1. Formaldehyde, acetone, benzaldehyde, o-methoxybenzaldehyde and furfural were used as carbonyl compounds for the

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Synthesis of Some Formasanes, Thiohydrazides, and
Thiadiazolines With a Carbohydrate Radical

SOV/79-29-4-63/77

condensation. Thiohydrazides (I) necessary for the synthesis of the thiadiazolines (II) were reduced with H_2S according to the method of G. Zemlen (Ref 17) by reduction of the formazyl compounds (III) where R' represents a carbohydrate radical (Scheme 2). The formasanes can take part in the reactions in two tautomeric forms (III a) and (III b). If R differs from R' , 4 products are bound to be synthesized according to the scheme, i. e. 2 thiohydrazides and 2 hydrazines. In the case of $R=R'$, however, only one thiohydrazide and one hydrazine are bound to result. In the case of the reduction of the compounds (III), (V), (VII), and (IX) (Table 1) where $R=R'$ the hydrazides of the thiogalactonic- and thioarabonic acid (X), (XI), (XII), and (XIII) (Table 2) were obtained. In the case of the reduction of (IV), (VI), and (VIII), where $R \neq R'$ are different, unexpectedly only one thiohydrazide was obtained with a not substituted aryl, and a substituted aryl hydrazine. Thus the equilibrium shifted in the reaction towards the direction of the "form" \bar{A} which is interesting with respect to the new data on the tautomerism of the asymmetrical formasanes in dependence on the nature of the radicals

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Synthesis of Some Formasanes, Thiohydrazides, and
Thiadiazolines With a Carbohydrate Radical

SOV/79-29-4-63/77

R and R' (Ref 18). The thiohydrazides react smoothly with aldehydes in the hydrochloric acid containing alcohol medium under formation of 1,3,4, thiadiazolines (Table 3) which crystallize easily and are soluble in alcohol, dioxane, and acetone difficultly soluble in benzene and chloroform, insoluble in water. The thiohydrazides and thiadiazolines have a slight antitubercular activity. There are 3 tables and 21 references, 3 of which are Soviet.

ASSOCIATION: Ural'skiy filial Akademii nauk SSSR (Ural Branch of the Academy of Sciences, USSR)

SUBMITTED: March 20, 1958

Card 3/3

YERMAKOVA, M.I.

Some complex-forming compounds of the formazon group. Trudy Inst.-
khim. UFAN SSSR no.4:9-102 '60. (MIRA 16:6)
(Formazan) (Complex compound)

5.3600

78269

SOV/79-30-3-23/69

AUTHORS: ~~Yermakova, M. I., Knylov, Ye. I.,~~ Postovskiy, I. Ya.

TITLE: Structure of Formazans. Study of the Magnetic Susceptibility of Complex Compounds of Copper, Cobalt, and Nickel With Formazans

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 849-854 (USSR)

ABSTRACT: Complexes of Cu, Co, and Ni were prepared with the following formazans: 1,3,5-triphenylformazan, 1-p-tolyl-3,5-diphenylformazan, 1-p-chlorophenyl-3,5-diphenylformazan, and 1-o-carboxyphenyl-3,5-diphenylformazan. The physical constants of the prepared complexes are shown in Table 1.

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Structure of Formazans. Study of the
Magnetic Susceptibility of Complex
Compounds of Copper, Cobalt, and Nickel
With Formazans

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Table 1. Key: (1) Complex compounds of formazans;
(I) (Bis-1,3,5-triphenylformazyl)-copper; (II)
[Bis-(1-p-tolyl-3,5-diphenylformazyl)]-copper;
(III) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)]-
copper; (IV) 1-o-Carboxyphenyl-3,5-diphenylformazyl-
copper; (V) [(Bis-1,3,5-triphenylformazyl)]-cobalt;
(VI) [Bis-(1-p-tolyl-3,5-diphenylformazyl)]-cobalt;
(VII) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)]-
cobalt; (VIII) (Bis-1,3,5-triphenylformazyl)-nickel;
(IX) [Bis-(1-p-tolyl-3,5-diphenylformazyl)]-nickel;
(X) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)]-
nickel; (XI) (1-o-Carboxyphenyl-3,5-diphenylformazyl)-
nickel; (2) Empirical formula; (3) Mp; (4) Found;
(5) Literature; (6) Nitrogen content (%); (7) Found;
(8) Calculated; (9) Metal content (%); (10) Found;
(11) Calculated.

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Table 1

	2	3		6		9	
		4	5	7	8	10	11
I	$C_{28}H_{30}N_8Cu$	159—160°	158°	17.15	16.92	9.21	9.59
II	$C_{40}H_{34}N_8Cu$	158—159	156	16.01	16.24	9.35	9.20
III	$C_{38}H_{28}N_8Cl_2Cu$	166—168	—	15.38	15.33	8.50	8.69
IV	$C_{20}H_{14}O_2N_4Cu$	231 decomp.	228 decomp.	13.60	13.80	15.47	15.65

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(Table 1 continued)

V	$C_{35}H_{30}N_8Co$	227—228	228—230	17.28	17.04	9.11	8.16
VI	$C_{40}H_{34}N_8Co$	236—237	238	16.37	16.35	8.61	8.50
VII	$C_{38}H_{28}N_8Cl_4Co$	184—185	—	15.19	15.44	8.03	8.11
VIII	$C_{38}H_{30}N_8Ni$	306 decomp.	300 decomp.	17.50	17.05	8.77	8.93
IX	$C_{40}H_{34}N_8Ni$	293 decomp.	287 decomp.	16.42	16.35	8.42	8.56
X	$C_{38}H_{28}N_8Cl_2Ni$	288 decomp.	—	15.12	15.44	7.85	8.04
XI	$C_{20}H_{14}O_2N_4Ni$	275 decomp.	270 decomp.	14.37	13.97	14.82	14.64

Table 2 shows the magnetic susceptibility of the prepared compounds.

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Structure of Formazans. Study of the
Magnetic Susceptibility of Complex
Compounds of Copper, Cobalt, and Nickel
With Formazans

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SOV/79-30-3-23/69

Table 2. Key: (1) Magnetic susceptibility of complex compounds of formazan with copper, cobalt, and nickel (at the intensity of magnetic field 2260 oersted); (2) Temperature, K; (3) μ Effect (in Bor's magnetones). (I) (Bis-1,3,5-triphenylformazyl)-copper; (II) [Bis-(1-p-tolyl-3,5-diphenylformazyl)] -copper; (III) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)] -copper; (IV) 1-o-Carboxyphenyl-3,5-diphenylformazyl-copper; (V) (Bis-1,3,5-triphenylformazyl)-cobalt; (VI) [Bis-(1-p-tolyl-3,5-diphenylformazyl)] -cobalt; (VII) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)] -cobalt; (VIII) (Bis-1,3,5-triphenylformazyl)-nickel; (IX) [Bis-(1-p-tolyl-3,5-diphenylformazyl)] -nickel; (X) [Bis-(1-p-chlorophenyl-3,5-diphenylformazyl)] -nickel; (XI) (1-o-Carboxy-3,5-diphenylformazyl) -nickel.

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Structure of Formazans. Study of the
Magnetic Susceptibility of Complex
Compounds of Copper, Cobalt, and Nickel
With Formazans

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Table 2

	2	$\chi_g \cdot 10^4$	$\chi_M \cdot 10^4$	$\theta^\circ K$	3
I	293	1.55	1381	} +5	1.81
	196	2.79	2197		
	77	8.00	5652		
II	291	1.62	1494	} +4	1.87
	196	2.80	2303		
	77	8.01	5900		
III	293	2.14	1900	} ---10	2.08
	196	3.35	2822		
	77	8.56	6637		
IV	291	3.37	1557	} +4	1.90
	196	5.22	2303		
	77	14.60	6116		
V	291	1.86	1572	} 0	1.93
	196	3.07	2305		
	77	8.58	5903		

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Structure of Formazans. Study of the
Magnetic Susceptibility of Complex
Compounds of Copper, Cobalt, and Nickel
With Formazans

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SOV/79-30-3-23/69

(Table 2 continued)

VI	291	2.08	1795	}	0	2.05
	196	3.34	2647			
	77	9.26	6773			
VII	291	2.11	1911	}	0	2.12
	196	3.39	2839			
	77	9.45	7237			
VIII	291	0.273	-159			
IX	291	0.279	-209			
X	291	0.289	-290			
XI	291	0.283	123			

Card 7/8

Structure of Formazans. Study of the
Magnetic Susceptibility of Complex
Compounds of Copper, Cobalt, and Nickel
With Formazans

78269
SOV/79-30-3-23/69

The measurements of the magnetic susceptibility of the obtained complexes indicate the planar position of the formazyl group structure. There are 2 tables; 2 figures; and 13 references; 3 U.K., 3 German, 2 U.S., 2 Austrian, 1 French, 2 Soviet. The 5 U.S. and U.K. references are: Nineham, A. W., Chem. Revs., 355 (1955); Hunter L., Roberts, C. B., J. Chem. Soc., 822 (1941); Figgis, B. N., Nyholm, R. S., J. Chem. Soc., 12 (1954); Kondo M., Kubo M., J. Phys. Chem., 62, 468 (1958); Bhatnagar, S. S., Khana, M. L., Nevgi, M. B., Philosoph. Mag., 25, 234 (1938).

ASSOCIATION: Institute of Chemistry of the Ural Branch of the
Academy of Sciences of the USSR (Institut khimii
Ural'skogo filiala Akademii nauk SSSR)

SUBMITTED: March 18, 1959
Card 8/8

YERMAKOVA, M.I.; VASIL'YEVA, N.L.; POSTOVSKIY, I.Ya.

N,N'-bis(2-hydroxy-5-sulfophenyl)-C-cyanoformazan as a reagent
for the photometric determination of gallium. Zhur. anal. khim.
16 no. 1:8-13 Ja-F '61. (MIRA 14:2)

1. Institut of Chemistry, Academy of Sciences of the U.S.S.R.,
Ural Branch, Sverdlovsk.

(Gallium—Analysis) (Formazan)

YERMAKOVA, M. I.

Cand Chem Sci - (diss) "Synthesis and properties of several complexating compounds of the formazan group." Sverdlovsk, 1961. 19 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Ural Polytechnic Inst imeni S. M. Kirov); 150 copies; price not given; (KL, 6-61 sup, 197)

VASIL'YEVA, N.L.; YERMAKOVA, M.I.; POSTOVSKIY, I.Ya.

Determination of gallium with N,N-dl(2-hydroxy-5-sulfophenyl)
C-cyanoformazan. Zhur. VKHO 5 no.1:110 '60. (MIRA 14:4)

1. Institut khimii Ural'skogo filiala Akademii nauk SSSR.
(Gallium—Analysis)

S/075/63/018/001/003/010
E071/E452

AUTHORS: Vasil'yeva, N.L., Yermakova, M.I.

TITLE: Use of formazans in analytical chemistry
Communication 2. The determination of gallium
with N,N'-di(2-hydroxyphenyl)-C-cyanformazan

PERIODICAL: Zhurnal analiticheskoy khimii, v.18, no.1, 1963, 43-51

TEXT: A compound N,N'-di(2-hydroxyphenyl)-C-cyanformazan was synthesized and its interaction with gallium studied. Depending on conditions, the formazan forms two blue compounds with absorption maxima at 634 and 630 mμ. The compounds have the nature of internal complexes - nonelectrolytes. The range of existence of one complex is pH 2-5 and that of the other is pH above 5. On the basis of optical properties of solutions, chemical composition, X-ray and dehydration properties of crystalline precipitates as well as equilibria studies in solutions, the probable structure of the compounds is proposed. Depending on the pH of the medium gallium coordinates either with the ionic (pH > 5) or undissociated form of formazan (pH < 5) on changes of pH the compounds undergo a reversible transformation.
Card 1/2

Use of formazans ...

S/075/63/018/001/003/010
E071/E452

The molar ratio of gallium to formazan is 1:1.
N,N'-di(2-hydroxyphenyl)-C-cyanformazan is recommended for the photometric determination of gallium in the presence of aluminium, zinc, lead, cadmium, manganese and small quantities of indium, germanium, copper and nickel. The two last elements are separated from gallium by extraction with benzene. The sensitivity of the reaction is 0.04 µg/ml of gallium. Z.M.Podkina participated in the work. There are 6 figures and 1 table. ✓

ASSOCIATION: Institut khimii Ural'skogo filiala AN SSSR,
Sverdlovsk (Institute of Chemistry, Ural Branch
AS USSR, Sverdlovsk)

SUBMITTED: April 7, 1962

Card 2/2

AID Nr. 995-7 21 June

A FORMAZAN AS A NEW REAGENT FOR THE DETERMINATION OF Zr
(USSR)

Vasil'yeva, N. L., and M. I. Yermakova. Zhurnal analiticheskoy khimii,
v. 18, no. 4, Apr 1963, 545-547. S/075/63/018/004/014/015

A method is proposed which uses N, N'-bis(2-hydroxy-5-sulfohenyl)-C-oxanor-
formazan as the chelating agent in the photometric determination of Zr.

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001962810006-8

Card 1/1

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001962810006-8"

YERMAKOVA, M.I.; POSTOVSKIY, I.Ya.

Chemistry of formazans. Part 7: Reaction with diazonium salts and the aminomethylation of 1,5-diphenylformazan. Zhur. ob. khim. 3/4 no.9:2855-2859 S '64.

(MIRA 17:11)

1. Institut khimii Ural'skogo filiala AN SSSR.

L 10456-67 EWT(1)/EEC(k)-2/EWP(k) IJP(c) WQ/JM

ACC NR: AP6023877

SOURCE CODE: UR/0109/66/011/007/1321/1322

AUTHOR: Golant, M. B., Savel'yev, V. S., Korotkova, Z. S., Alekseyenko, Z. T., Yermakova, M. I. 5/

ORG: none

TITLE: Laser and BW-tube bands overlap

SOURCE: Radiotekhnika i elektronika, v. 11, no. 7, 1966, 1321.-1322

TOPIC TAGS: laser, backward wave tube

ABSTRACT: In 1964, Yeu Ta reported the development of a BW-tube operating at a wavelength of 0.39 mm (Travaux du 5 congress international, Paris, 14-18 Sept, 1964). In the same year H. A. Gebbie et al. reported the development of a laser operating at 0.337 mm (Nature, v. 202, 4933, 685, 1964). In 1965, Soviet researchers designed a BW-tube operating at 0.296 mm. Thus, the laser band and BW-tube band have become overlapped. "The authors wish to thank, N. A. Irisova and Ye. A. Vinogradov for their help in organizing measurements." Orig. art. has: no figure, formula or table.

SUB CODE:20 / SUBM DATE: 21Feb66/ ORIG REF: 002 / OTH REF: 002

Card 1/1 *lmo*

UDC: 621.385.6.029.67+621.370.325

REF 2062702
AUTHOR: ^{44,55}Andrianov, K. A.; ^{44,55}Yermakova, M. N.; ^{44,55}Sablina, G. P. ^{44,55}

ORG: Institute of Macromolecular Compounds, AN SSSR (Institut vysokomolekulyarnykh soyedineniy AN SSSR) ^{44,55}

TITLE: Condensation of borodimethylsiloxane ⁷oligomers with tributoxyaluminum

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 10, 1965, 1771-1775

TOPIC TAGS: organoboron compound, organoaluminum compound, oligomer, condensation reaction, high polymer, polymer physical chemistry, polymer structure, plastic deformation, elongation, SILOXANE

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CIA-RDP86-00513R001962810006-8

obtained prior to get information are not cross-linked, and are not

Card 1/2

UDC: 541.64+678.86

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CIA-RDP86-00513R001962810006-8"